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ABSTRACT

As part of an effort to develop courses and programs that reflect California business and industry's current and future needs, two studies were performed by Solano Community College to examine statewide trends and issues related to office automation and marketing and management. In conducting the study of office automation, 5,000 surveys were distributed to companies throughout the state, requesting information on the use of particular hardware and software, considerations in applicant selection, on-the-job training, company characteristics, and interest in community college courses. Study findings, based on a 16% response rate, included the following: (1) 88% of the respondents used microcomputers, with 74% to 84% of these respondents using IBM or IBM-compatible computers; (2) 39% felt that the greatest obstacle to microcomputer productivity was inadequate training; and (3) over 80% of respondents trained their employees on the job for microcomputer applications. The marketing and management study involved the distribution of approximately 4,000 surveys in a three-tiered effort. Usable responses were returned by 224 firms. The survey measured the predicted level of job opportunities in 22 fields for the following 2 years, the level of employment a properly educated applicant could seek in one of those fields, whether employees would need additional on-the-job training, qualifications considered in assessing job applicants, training costs, use of community colleges for training, and information regarding international trade issues. Survey findings are presented in a series of graphs and tables. Copies of the survey instruments are included. (MAB)

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RESULTS
of the
1992 STATE-WIDE
BUSINESS and INDUSTRY SURVEY

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Compiled by
Carole Jarrett, Project Director
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INTRODUCTION

The contents of this manual are arranged to provide you with

(1) detailed information for those individuals wanting hard facts, as well as

(2) ready-to-share material with a script and overhead transparency masters.

The intent was to provide in-depth information which can easily be used and shared.

RESULTS
of the
1992 STATE-WIDE
BUSINESS and INDUSTRY SURVEY

INTRODUCTION

Background

There is a constant need by business educators to work with business and industry in providing courses and programs that reflect current and future technology and that provide methods of business operation for an increasingly competitive world market. The Chancellor's Office of the California Community Colleges recognizes this need and, for this reason, provided a grant opportunity for a survey of businesses and industries throughout the state. Solano Community College's grant proposal was selected for the project. Solano's proposal included California Business Education Association as a key participant in distributing and collecting the surveys.

The purpose of this project was to provide research to enable California community colleges to provide courses and programs that reflect current and future technological trends. The involvement of California Business Education Association caused the results to be readily accessible and more useable to California Community College instructors. It was expected that when the results were returned to the local level, the educators would be able to recognize the results of their involvement and endorse its credibility.

The survey collected data on current and future hardware and software trends, staffing issues, and training and support issues. It identified future directions for marketing and distributive education. The intent was to create a survey that could be used by schools throughout the state, thereby eliminating the need and expense of producing independent, local surveys.

The contractor for this project was Solano Community College. The project director was Carole Bielefeld Jarrett, Instructional Resource Specialist, Solano Comunity College. She worked closely with a steering committee with representatives from both Office Education and Distributive Marketing. Two key participants on the steering committee for the project were Jane Thompson and Don Busché.

Jane Thompson, Business Education instructor at Solano Community College, was the representative for Office Education on the Steering Committee.

She was a past president of California Business Education Association and served on the CBEA Strategic Planning and Legislative committees. She was also President of the Western Business Education Association.

Don Busché, Dean of Vocational Education, at Saddleback College, was a second member of the Steering Committee and represented both areas. He was a past president of California Business Education Association and was chair of the CBEA Strategic Planning Committee.

The 1992 Office Automation Survey for Business and Industry

The survey for Office Automation was originally developed by the California Community College state-wide Office Technology Advisory Committee. The eventual 103 questions were a result of committee input, individual input, and research in the field. A copy of the survey is included.

Carolyn Taylor, Ph.D., was selected to organize this portion of the project. Taylor coordinated computer-training activities for California secondary and community college business teachers from 1981-1989, professional development projects sponsored by the State Department of Education and the Chancellor's Office, California Community College.

Approximately 5,000 surveys were distributed throughout the state by CBEA members. There were 790 useable, returned surveys which represent almost a 16% response rate. Without having a sophisticated follow-up system which may have been provided through a private research institute, we felt that this rate of return was good. Generally speaking, a return rate of only 10% is acceptable for this type of survey.

A detailed break down of the survey responses is provided. The first six columns provide actual total responses for each question. The "Total" column provides actual total responses for the entire state of California. The last seven columns provide percentages of the totals for the entire state as well as percentages in each of the six CBEA sections (or regions).

The first fifteen charts provide a visual presentation of the highlights of the information obtained from the Office Technology portion of the survey. Information tallied for the entire state is compared with tallies for most of the sections. In most cases, Central section has been omitted as the responses from this sectio were minimal and it skewed the results of the graph.

The 1992 Marketing & Management Survey for Business and Industry

The survey for Marketing & Management was developed with input from the state-wide Business Education Advisory Committee. L. Joyce Arntson of Saddleback College in Mission Viejo was selected to organize this portion of the project. A copy of this survey is provided.

Approximately 4,000 surveys were distributed in a three-tiered effort to obtain a reasonable response. Approximately 224 useable surveys were returned. Without having a sophisticated follow-up system which might have been available from a private research institution, the rate of return was felt to be acceptable. Only 57% of the respondents indicated the county of origin, resulting in a limitation of regional information.

This survey was based on the 22 T.O.P.S. codes used by the California community colleges; consequently, future curriculum development will be enhanced by the results of this survey.

Regional Information

The 58 counties within the state of California are divided into the 6 CBEA sections as follows:

Bay: Alameda, Contra Costa, Lake, Marin, Mendocino, Monterey, Napa, San Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.

Northern: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo, and Yuba.

Central: Fresno, Kern, Kings, Madera, Mariposa, Merced, Stanislaus, Tulare, and Tuolumne.

San Diego: Imperial and San Diego.

Southern: Inyo, Mono, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura.

Los Angeles: Los Angeles.

California Counties (and CBEA sections)

01	Alameda (Bay)	21	Marin (Bay)	41	San Mateo (Bay)
02	Alpine (North)	22	Mariposa (Central)	42	Santa Barbara (So.)
03	Amador (North)	23	Mendocino (Bay)	43	Santa Clara (Bay)
04	Butte (North)	24	Merced (Central)	44	Santa Cruz (Bay)
05	Calaveras (North)	25	Modoc (North)	45	Shasta (North)
06	Colusa (North)	26	Mono (Southern)	46	Sierra (North)
07	Contra Costa (Bay)	27	Monterey (Bay)	47	Siskiyou (North)
08	Del Norte (North)	28	Napa (Bay)	48	Solano (Bay)
09	El Dorado (North)	29	Nevada (North)	49	Sonoma (Bay)
10	Fresno (Central)	30	Orange (Southern)	50	Stanislaus (Central)
11	Glenn (North)	31	Placer (North)	51	Sutter (North)
12	Humboldt (North)	32	Plumas (North)	52	Tehama (North)
13	Imperial (San Diego)	33	Riverside (Southern)	53	Trinity (North)
14	Inyo (Southern)	34	Sacramento (North)	54	Tulare (Central)
15	Kern (Central)	35	San aBenito (Bay)	55	Tuolumne (Central)
16	Kings (Central)	36	San Bernardino (So.)	56	Ventura (Southern)
17	Lake (Bay)	37	San Diego (S. D.)	57	Yolo (North)
18	Lassen (North)	38	San Francisco (Bay)	58	Yuba (North)
19	Los Angeles (L.A.)	39	San Joaquin (Bay)		
20	Madera (Central)	40	San Luis Obispo(Bay)		

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Solano Community College
- Writesman Long
- Eileen Kennedy-Liang, Ed.D.
- Virginia Holten, Ph.D.
- Janet Pendoley

CBEA Steering Committee
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- Don Busché, Saddleback College

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- Joyce Arntson, Saddleback College

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- Ralphine Andrus, Solano College

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- Joe McFarland, state president 1992-93
- Lee Thompson, Executive Secretary

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- Janet Baker, San Diego key contact
- Debbie Briano, Central key contact
- Lewis Cain, Northern key contact
- Mary Hampton, Southern key contact
- Nancy Hawk, San Diego key contact
- Brenda Ingram-Cotton, Los Angeles key contact
- Rhoda James, Los Angeles, key contact
- Marie McClaskey, Bay key contact
- Lorrain Sawyer, Southern key contact
- Pat Seaman, Bay key contact
- Gwen Watson, Bay key contact
- Henry Williams, Northern key contact

Chancellor's Office
- Kim Perry, Project Monitor
- John Prentiss, Project Monitor

1992 OFFICE AUTOMATION SURVEY FOR BUSINESS AND INDUSTRY

Carolyn Taylor, Ed.D.
Coordinator

1992 OFFICE AUTOMATION SURVEY FOR BUSINESS AND INDUSTRY

Chart 1. Question 1: Does your company use micro computers?
Responses are provided in actual numbers as to state and section totals. Of the state-wide results 88% of the respondents used micro computers. The highest percentage was Los Angeles having 96% computer users, and the lowest percentage was Southern section having 70% computer users.

State	692	out of	790	or 88%
Bay	146	out of	157	or 92%
Northern	99	out of	108	or 91%
Central	12	out of	14	or 85%
Southern	141	out of	201	or 70%
Los Angeles	188	out of	194	or 96%
San Diego	87	out of	94	or 92%

Chart 2. Questions 2 through 5: Does your company use IBM or IBM-compatible, Macintosh, a combination of the two, or other type of microcomputers?
Responses are provided in percentages as to state and section totals. There is a minimum of 74% (Northern section) indicating IBM or IBM-compatible computers. The highest percentage of IBM-compatible usage was Southern section's 84%.

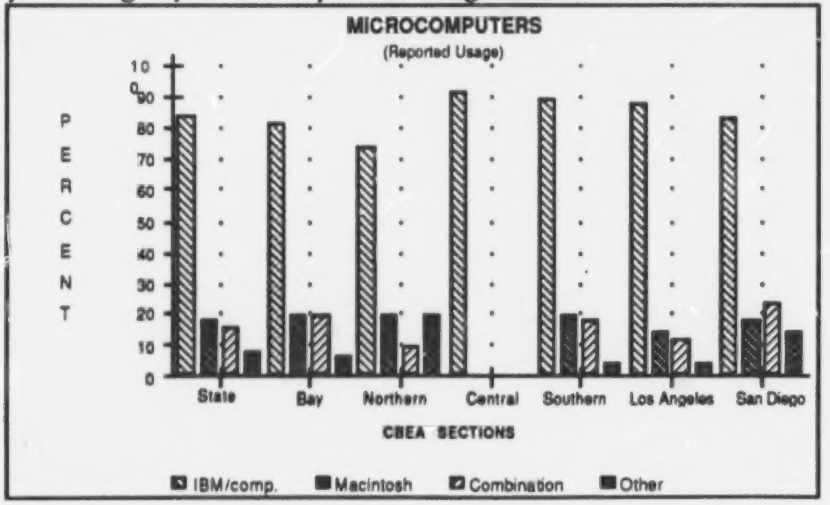


Chart 3. <u>Questions 6 through 8: What type of printers are presently used or that you have plans to purchase within one year?</u> Responses for "Letter Quality," "Dot Matrix," and "Laser" are provided in percentages as to state and section totals. Laser use was higher than dot matrix in all sections except Northern and Central indicating, perhaps, a metropolitan trend. (This chart is to be compared to Chart 4.)

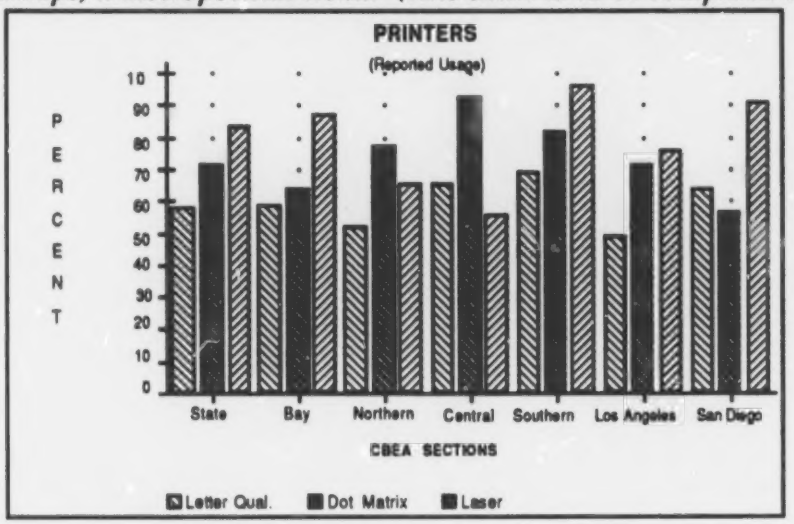


Chart 4. <u>Questions 9 through 11: What type of printers are presently used or that you have plans to purchase within one year?</u> Responses for "Color," "Plotter," and "Other" are provided in percentages as to state and section totals. The state-wide results as well as results from Northern, Southern, and San Diego sections indicate greater use of Plotters than Color printers. (This chart is to be compared to Chart 3.)

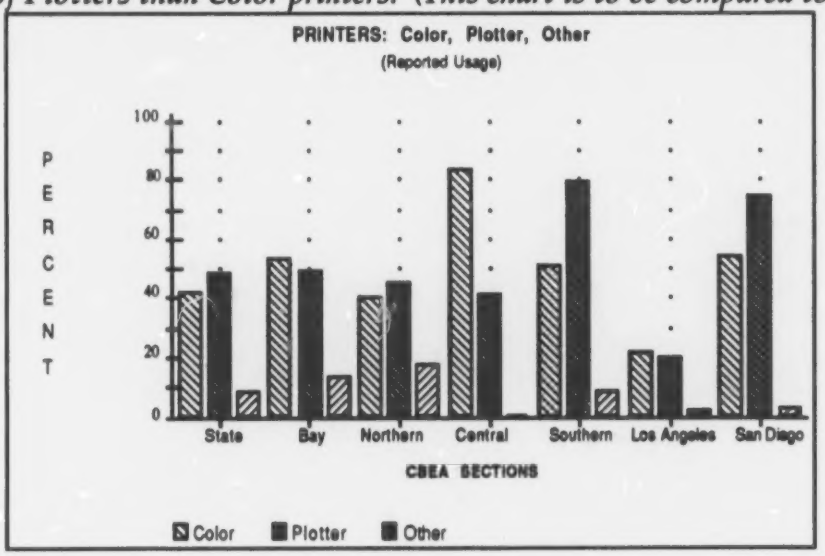


Chart 5. <u>Questions 12 and 13: What type of Networks are used? Local Area Network, or Wide Area Network?</u> Responses for "LAN" and "WAN" are provided in percentages as to state and section totals. Clearly, the Local Area Networks are the dominant choice.

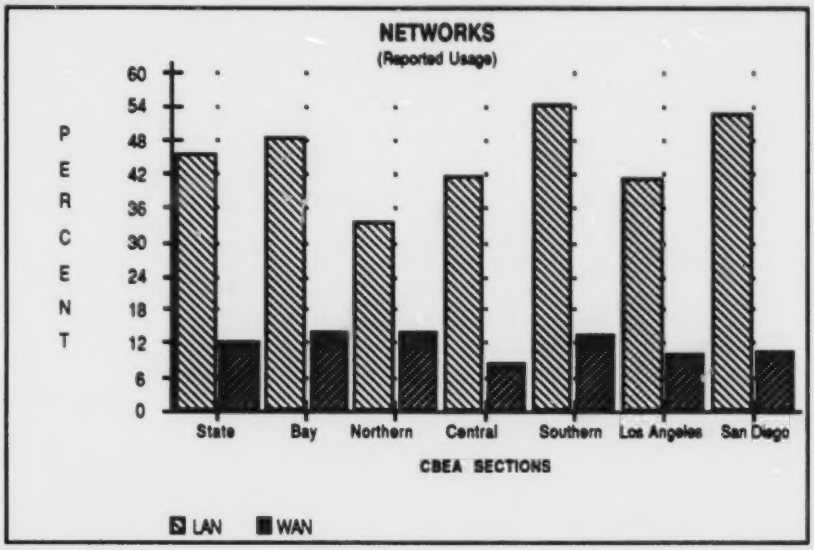


Chart 6. <u>Questions 14 through 25: What kind of peripheral devices are being used, or do you plan to purchase within one year</u>? Responses for "modem," "fax," "desk top scanner," and "hand-held scanner" peripheral devices are indicated in this Chart. Clearly the Fax and the Modem are extensively used.

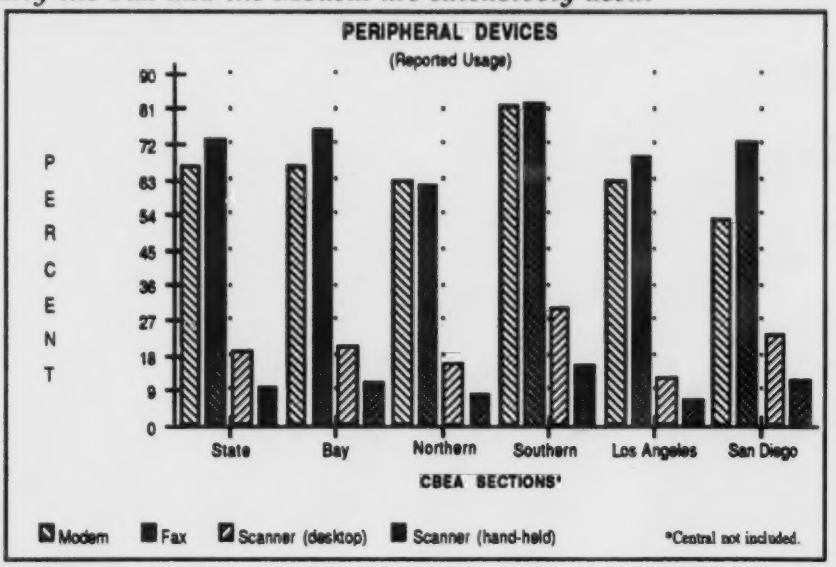


Chart 7. Questions 26 through 34 asked for responses as to operating systems and environments. Responses as to usage of "DOS 3," "DOS 4," "DOS 5," and "Windows" are indicated here. DOS 5 has the most dominate useage followed closely by Windows.

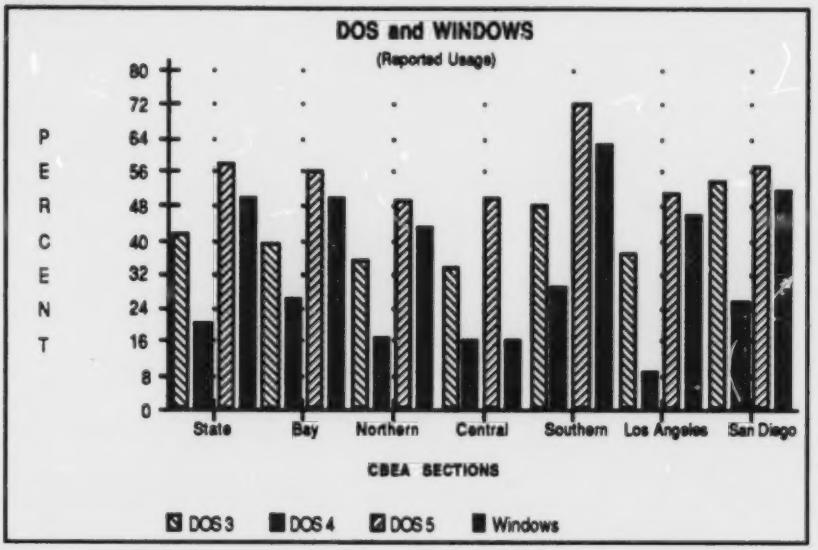


Chart 8. Questions 35 through 39 ask for responses to word processing programs used on IBM-compatible computers. Clearly WordPerfect is used by most offices.

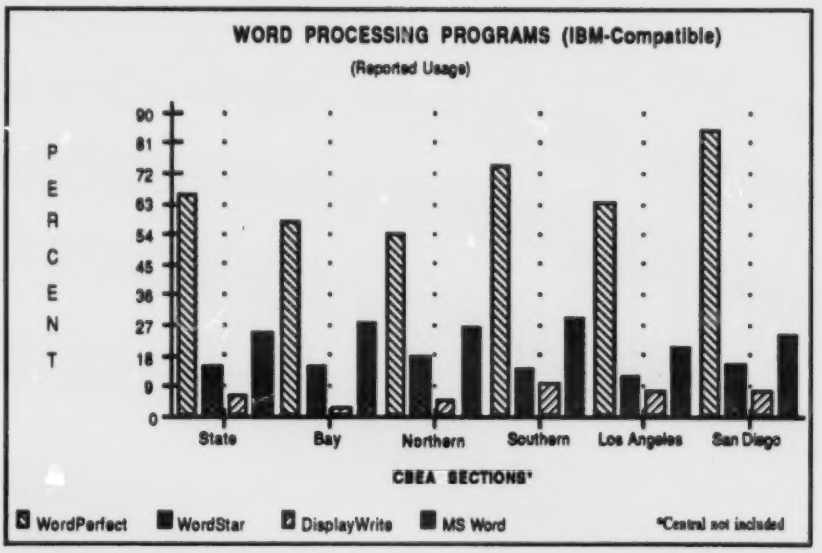


Chart 9. <u>Questions 40 through 44 ask for responses as to word processing programs used on Macintosh computers</u>. For the Macintosh computer, Microsoft Word appears to have the most dominate useage as a word processing program.

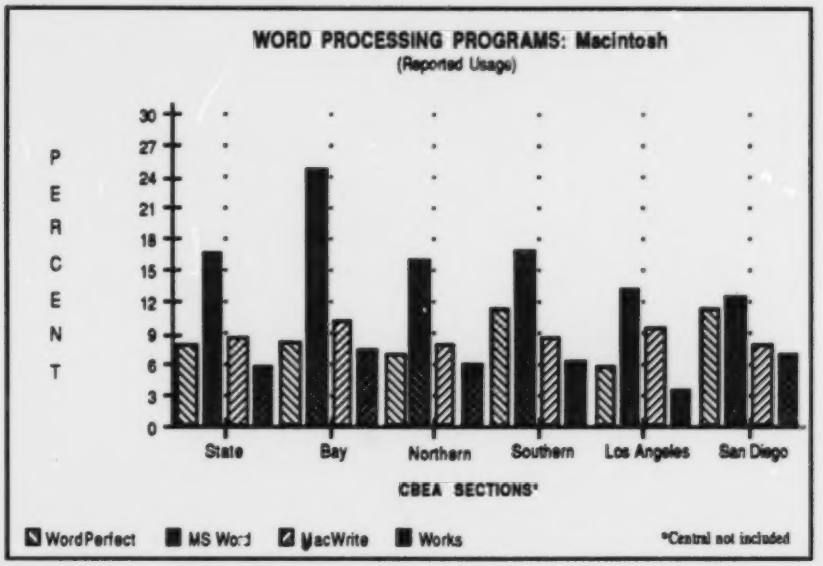


Chart 10. <u>Questions 45 through 51 requested information on the use of spreadsheet software</u>. Here are illustrated the responses for the DOS-machine spreadsheets. Lotus 1-2-3 version 3 appears to be most dominant. Lotus 1-2-3 version 2, however, is more dominant in Los Angeles and San Diego sections.

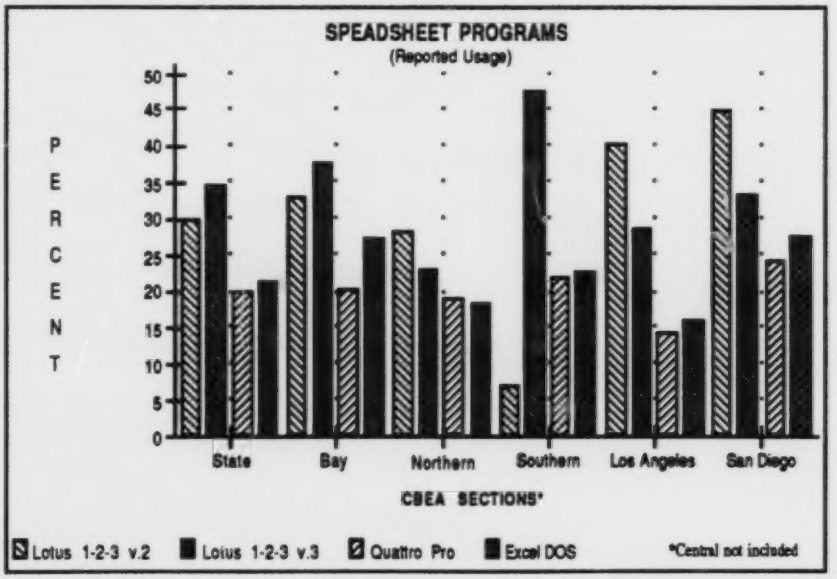


Chart 11. <u>Questions 52 through 57 asked for responses as to database software.</u> Responses are charted for dBASE III Plus, dBASE IV, Paradox, and FoxBase. In most cases, dBASE III Plus is in highest use, but dBASE IV appears stronger in Bay and Los Angeles sections.

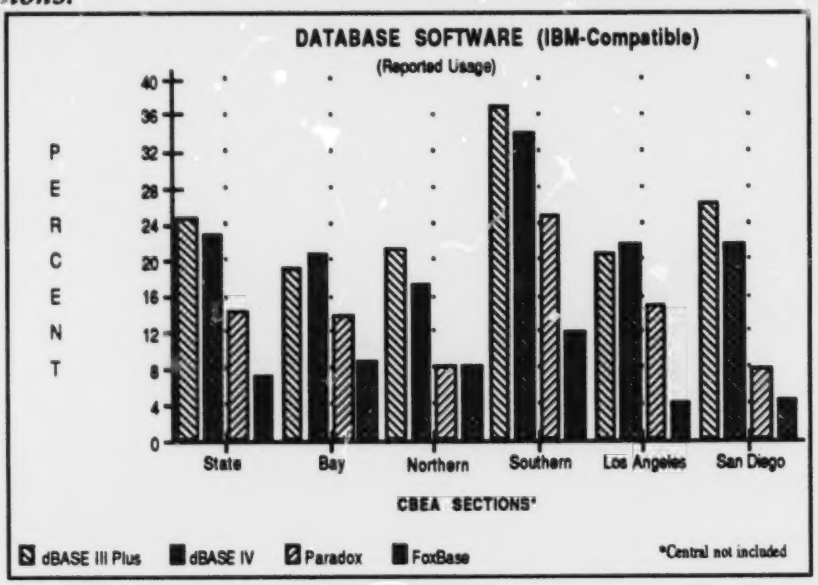


Chart 12. <u>Questions 63 through 75 asks for usage of graphics software for the IBM-compatible computers</u>. Illustrated below are the responses for "Harvard Graphic," "DrawPerfect," "Corel Draw," and "Microsoft Paint." The Harvard Graphic program appears to have widest useage with IBM-compatible computers.

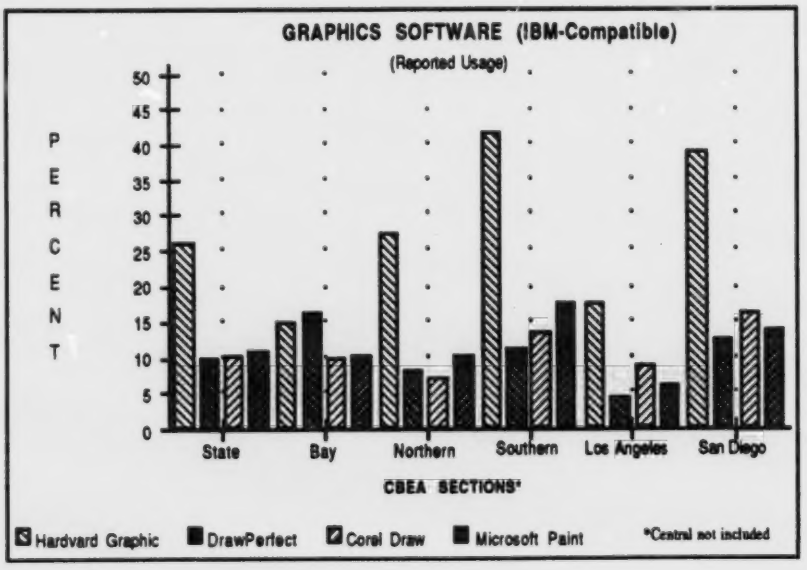


Chart 13. <u>Questions 63 through 75 asks for usage of graphics software for the Macintosh computer.</u> Illustrated below are the responses for "MacPaint," "MacDraw," "SuperPaint," and "Adobe Illustrator." MacDraw appears to be the most dominant of the brands followed closely by MacPaint.

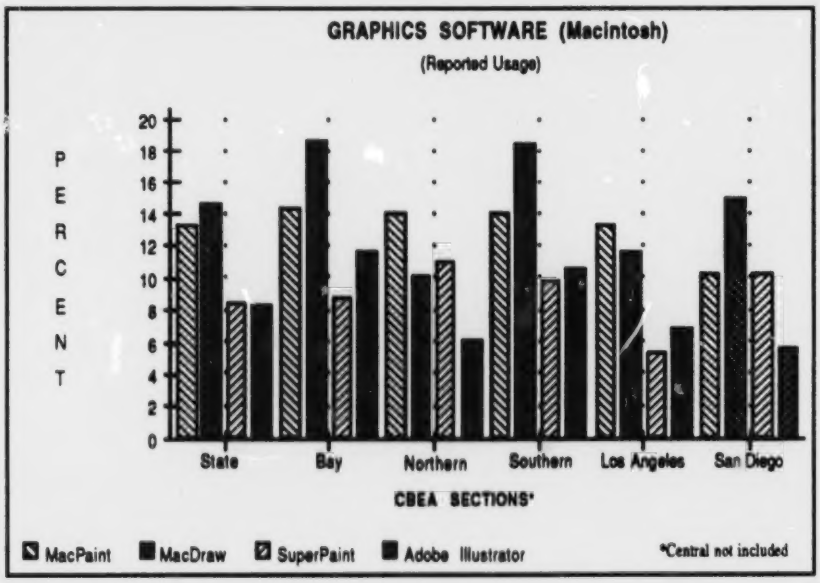


Chart 14. <u>Questions 76 through 84 as for usage of desktop publishing programs.</u> Illustrated here are the responses for "PageMaker for DOS," "PageMaker for Mac," "WordPerfect Pub," and "Ventura Publisher." PageMaker for the Macintosh appears to dominate the market, but on a state-wide basis, it is closely followed by the other three brands. On a regional basis, the preferences do not follow the state. In Los Angeles section PageMaker for DOS is leading.

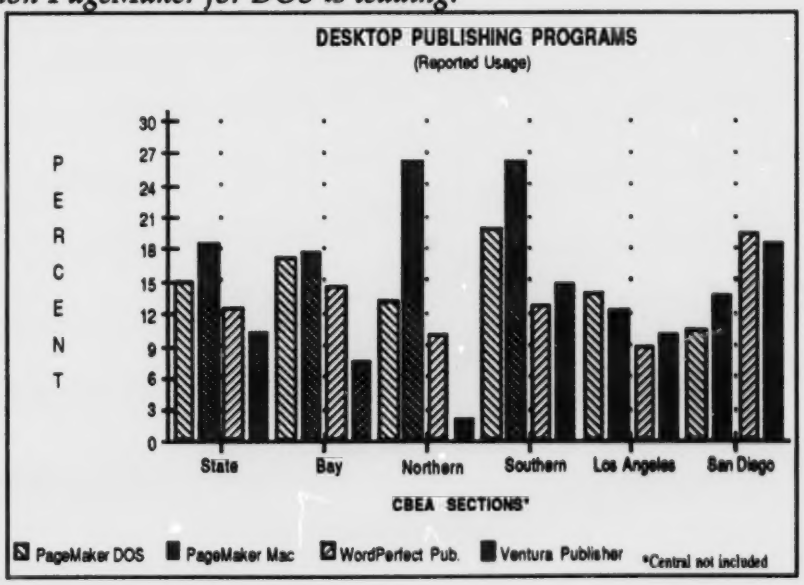


Chart 15. <u>Questions 85 through 91 ask for usage on integrated software.</u> Responses are illustrated for "Works DOS," "Works Mac," "Symphony," and "WordPerfect Office." Works for the Macintosh dominates in Bay and Northern sections, while Works for DOS dominates in Southern section as well as overall state wide. Symphony dominates in San Diego section which WordPerfect Office dominates in Los Angeles section. There does not seem to be any dominate program for integrated programs.

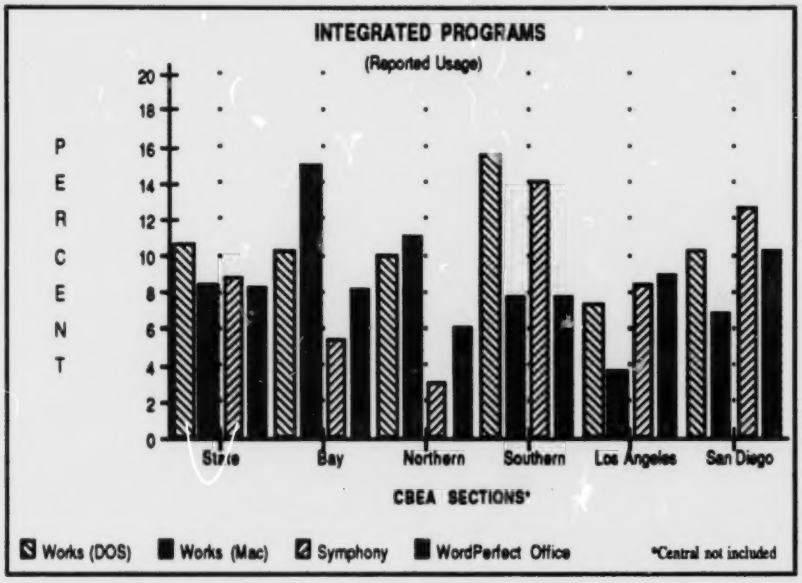


Chart 16. <u>Question 92 asked, "Which of the following does your company feel is an obstacle to microcomputer productivity? (Check all that apply)"</u>. Responses are tallied for the entire state. Of the responses, 39% indicated inadequate training as an obstacle to computer productivity; 25% indicated learning new software, 16% indicated poor vendor support, and 13% indicated personnel turnover.

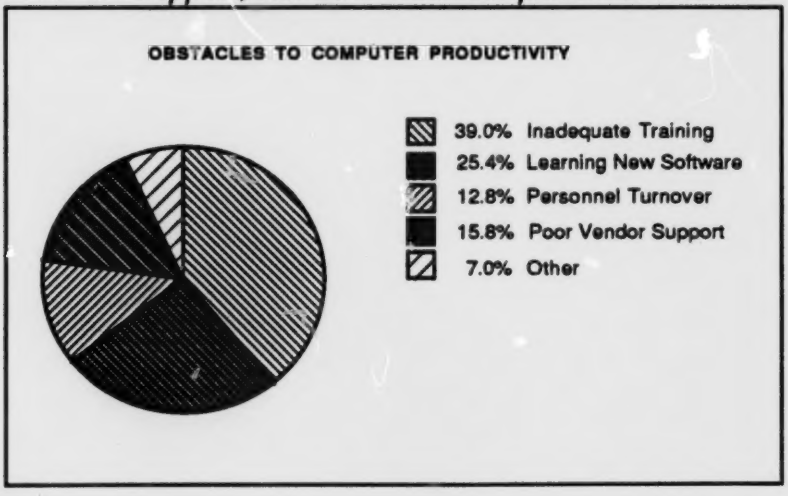


Chart 17. Question 93 asked, "How does your company evaluate a potential employee's microcomputer skills? (Check all that apply)". Responses are tallied for the entire state. Of the responses, 36% indicate that the interview is the main method to evaluate computer skills; 24% actually do a test of the skill; 20% provide reference checks; and 18% do not evaluate at all.

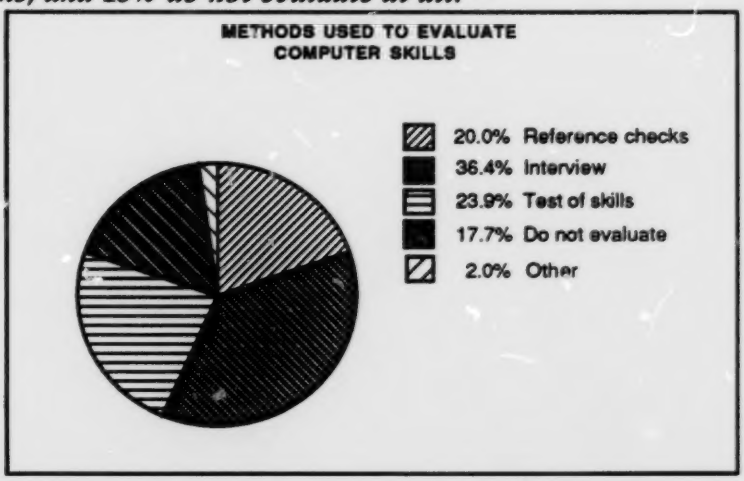


Chart 18. Question 94 asked, "Which of the following does your company use to train employees for micro-computer applications? (Check all that apply)" Responses are tallied for the entire state. Of the responses, the majority responded that on-the-job training was used to train employees followed by self-teaching methods.

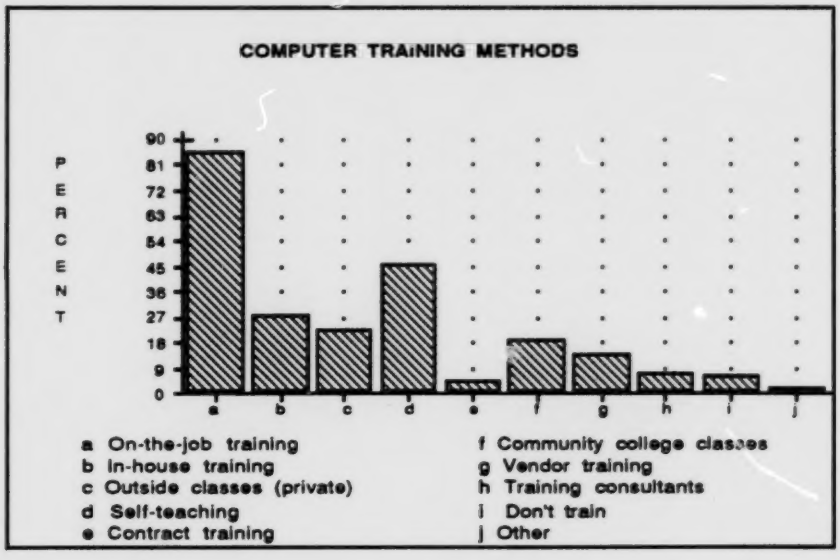


Chart 19. Question 95 asked, "If your company trains employees for microcomputer applications, rate your satisfaction with the current method(s) of training." Responses are tallied for the entire state. Of the responses, 38% stated they were somewhat satisfied, 24% were very satisfied, and 23% were neutral. Almost 11% were somewhat dissatisfied with the current method(s) of training.

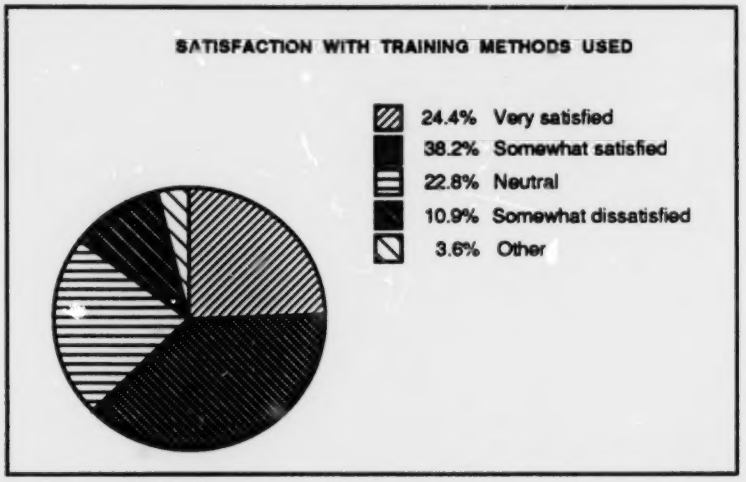


Chart 20. Question 97 asked, "How is most of your company's 'heavy typing' done?" Responses are tallied for each CBEA section. The majority clearly indicate that their production typing or heavy typing is done by a computer rather than a typewriter.

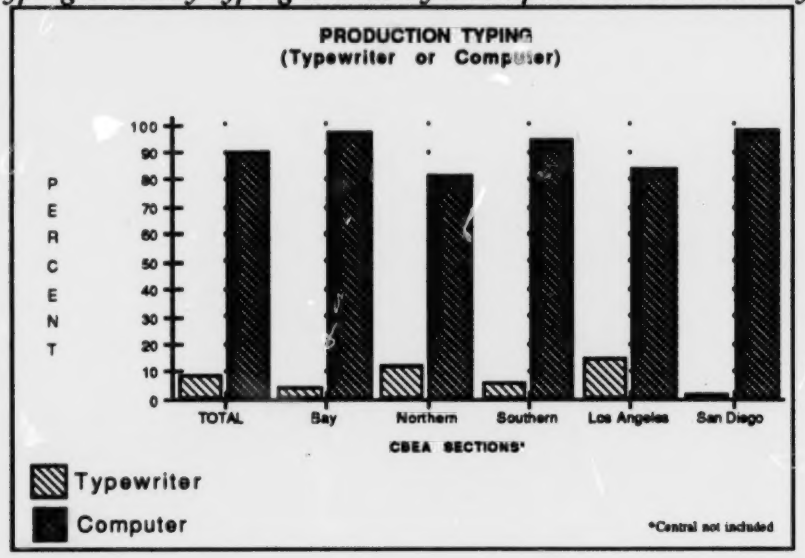


Chart 21. Question 98 asked, "How many employees are in your company?" Responses are tallied for the entire state. Of the responses, 33% were of small companies of 2 to 10 employees. 27% were of moderately small companies of 11 to 100 employees. 23% were of large companies with over 500 employees. 12% were of moderately large companies of 101 to 500 employees. Only 5% were respondents who were self employed.

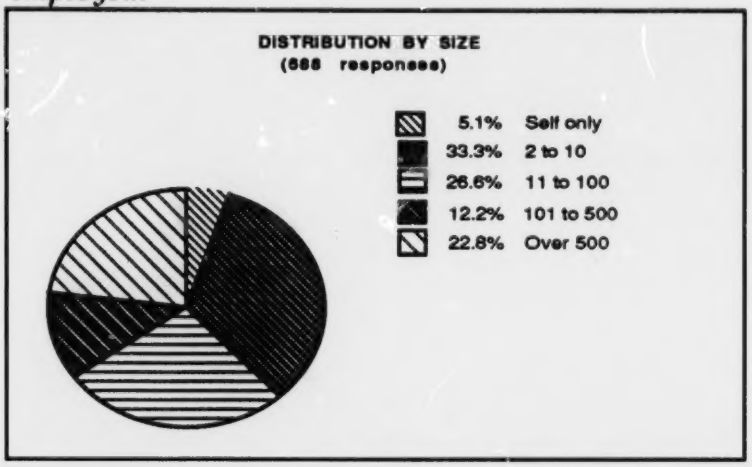
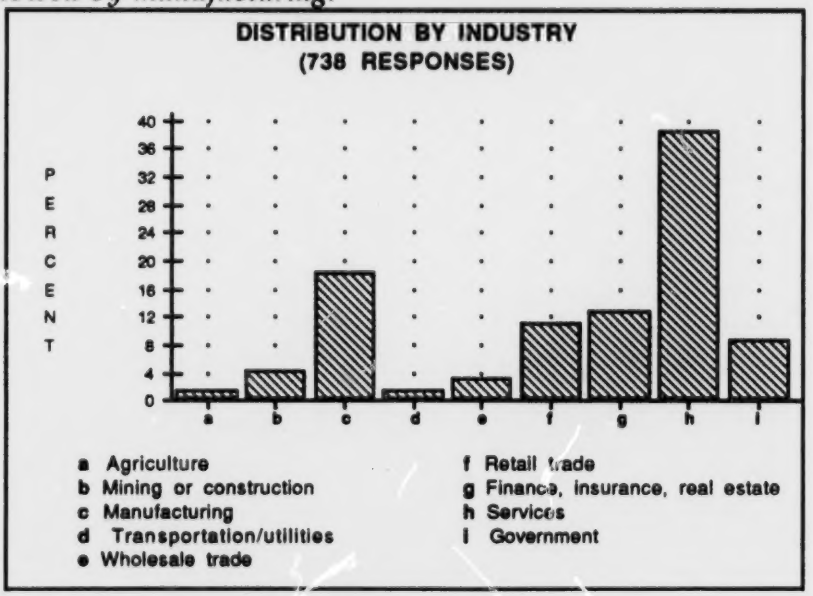


Chart 22. Question 99 asked, "Employment Development Department classifies all business and industries into the following jobs-by-industry code. What type of industry or business isyour firm? (Please force yourself into one choice only.)" Responses are tallied for the entire state. Of the responses, the majority were in services, followed by manufacturing.



OFFICE AUTOMATION SURVEY
8/17/92

SUMMARY TOTALS OF COUNTIES BY SECTIONS										%146	%99	%12	%141	%188	%87
	Bay	No.	Ctr	So.	LA	SD	Unk	Total	%692	Bay	North	Centr	South	LA	SD
a1	146	99	12	141	188	87	19	692	87.6%	93.0%	91.7%	85.7%	70.1%	96.9%	92.6%
b	11	9	2	60	6	7	3	98	12.4%	7.0%	8.3%	14.3%	29.9%	3.1%	7.4%
a2	118	73	11	126	164	72	14	578	83.5%	80.8%	73.7%	91.7%	89.4%	87.2%	82.8%
b	8	2	0	4	12	3		29	4.2%	5.5%	2.0%	0.0%	2.8%	6.4%	3.4%
c	8	11	0	3	1	1		24	3.5%	5.5%	11.1%	0.0%	2.1%	0.5%	1.1%
d	1	1	0	0		0		2	0.3%	0.7%	1.0%	0.0%	0.0%	0.0%	0.0%
a3	29	19	0	28	26	15	5	122	17.6%	19.9%	19.2%	0.0%	19.9%	13.8%	17.2%
b	3	3	0	4	6	1		17	2.5%	2.1%	3.0%	0.0%	2.8%	3.2%	1.1%
c	50	39	3	54	58	32	6	242	35.0%	34.2%	39.4%	25.0%	38.3%	30.9%	36.8%
d	5	4	0	6	5	4		24	3.5%	3.4%	4.0%	0.0%	4.3%	2.7%	4.6%
a4	29	9	0	25	22	20	2	107	15.5%	19.9%	9.1%	0.0%	17.7%	11.7%	23.0%
b	1	3	0	2	4	1		11	1.6%	0.7%	3.0%	0.0%	1.4%	2.1%	1.1%
c	43	36	2	43	44	27	5	200	28.9%	29.5%	36.4%	16.7%	30.5%	23.4%	31.0%
d	4	8	0	6	5	4	1	28	4.0%	2.7%	8.1%	0.0%	4.3%	2.7%	4.6%
a5	9	19	0	6	7	12		53	7.7%	6.2%	19.2%	0.0%	4.3%	3.7%	13.8%
b	2	1	0	0		0		3	0.4%	1.4%	1.0%	0.0%	0.0%	0.0%	0.0%
c	24	35	0	33	29	17	3	141	20.4%	16.4%	35.4%	0.0%	23.4%	15.4%	19.5%
d	6	10	0	6	14	8	1	45	6.5%	4.1%	10.1%	0.0%	4.3%	7.4%	9.2%
a6	77	46	7	88	82	50	7	357	51.6%	52.7%	46.5%	58.3%	62.4%	43.6%	57.5%
b	2	1	0	1	8	1	1	14	2.0%	1.4%	1.0%	0.0%	0.7%	4.3%	1.1%
c	29	35	0	24	28	17	3	136	19.7%	19.9%	35.4%	0.0%	17.0%	14.9%	19.5%
d	6	0	1	2	8	1		18	2.6%	4.1%	0.0%	8.3%	1.4%	4.3%	1.1%
a7	84	69	10	104	121	44	9	441	63.7%	57.5%	69.7%	83.3%	73.8%	64.4%	50.6%
b	1	0	0	2	6	2	1	12	1.7%	0.7%	0.0%	0.0%	1.4%	3.2%	2.3%
c	30	23	0	21	15	14	2	105	15.2%	20.5%	23.2%	0.0%	14.9%	8.0%	16.1%
d	3	1	0	1	6	3		14	2.0%	2.1%	1.0%	0.0%	0.7%	3.2%	3.4%
a8	115	58	6	122	129	71	15	516	74.6%	78.8%	58.6%	50.0%	86.5%	68.6%	81.6%
b	12	5	1	10	15	7	2	52	7.5%	8.2%	5.1%	8.3%	7.1%	8.0%	8.0%
c	7	20	1	4	15	4	2	53	7.7%	4.8%	20.2%	8.3%	2.8%	8.0%	4.6%
d	4	1	2	2	8	1		18	2.6%	2.7%	1.0%	16.7%	1.4%	4.3%	1.1%
a9	31	16	4	29	16	19	2	117	16.9%	21.2%	16.2%	33.3%	20.6%	8.5%	21.8%
b	9	3	0	9	13	3	2	39	5.6%	6.2%	3.0%	0.0%	6.4%	6.9%	3.4%
c	47	40	2	53	57	27	6	232	33.5%	32.2%	40.4%	16.7%	37.6%	30.3%	31.0%
d	10	10	1	8	17	9	1	56	8.1%	6.8%	10.1%	8.3%	5.7%	9.0%	10.3%
a10	29	18	2	45	15	26	1	136	19.7%	19.9%	18.2%	16.7%	31.9%	8.0%	29.9%
b	2	1	0	6	9	1		19	2.7%	1.4%	1.0%	0.0%	4.3%	4.8%	1.1%
c	51	40	2	46	57	27	7	230	33.2%	34.9%	40.4%	16.7%	32.6%	30.3%	31.0%
d	13	9	2	4	20	4	1	53	7.7%	8.9%	9.1%	16.7%	2.8%	10.6%	4.6%
a11	8	7	0	5	2	1	1	24	3.5%	5.5%	7.1%	0.0%	3.5%	1.1%	1.1%
b	2	0	0	0		20		22	3.2%	1.4%	0.0%	0.0%	0.0%	0.0%	23.0%
c	27	26	0	33	35	9	6	136	19.7%	18.5%	26.3%	0.0%	23.4%	18.6%	10.3%
d	14	10	1	9	18	0	1	53	7.7%	9.6%	10.1%	8.3%	6.4%	9.6%	0.0%
a12	71	33	5	77	78	46	5	315	45.5%	48.6%	33.3%	41.7%	54.6%	41.5%	52.9%
b	6	6	0	8	17	4	2	43	6.2%	4.1%	6.1%	0.0%	5.7%	9.0%	4.6%
c	34	36	2	30	47	20	6	175	25.3%	23.3%	36.4%	16.7%	21.3%	25.0%	23.0%
d	11	9	2	17	20	6	2	67	9.7%	7.5%	9.1%	16.7%	12.1%	10.6%	6.9%

a13	20	14	1	19	19	9	2	84	12.1%	13.7%	14.1%	8.3%	13.5%	10.1%	10.3%
b	5	2	0	5	2	2		16	2.3%	3.4%	2.0%	0.0%	3.5%	1.1%	2.3%
c	54	41	2	61	76	31	9	274	39.6%	37.0%	41.4%	16.7%	43.3%	40.4%	35.6%
d	17	15	3	20	23	13	2	93	13.4%	11.6%	15.2%	25.0%	14.2%	12.2%	14.9%
a14	97	62	10	115	118	46	15	463	66.9%	66.4%	62.6%	83.3%	81.6%	62.8%	52.9%
b	13	7	0	8	17	4		49	7.1%	8.9%	7.1%	0.0%	5.7%	9.0%	4.6%
c	17	20	1	10	22	19	1	90	13.0%	11.6%	20.2%	8.3%	7.1%	11.7%	21.8%
d	3	6	0	4	10	6	1	30	4.3%	2.1%	6.1%	0.0%	2.8%	5.3%	6.9%
a15	53	21	2	46	25	23	6	176	25.4%	36.3%	21.2%	16.7%	32.6%	13.3%	26.4%
b	13	9	1	11	16	6	1	57	8.2%	8.9%	9.1%	8.3%	7.8%	8.5%	6.9%
c	37	32	4	40	53	21	6	193	27.9%	25.3%	32.3%	33.3%	28.4%	28.2%	24.1%
d	17	19	0	19	19	20	1	95	13.7%	11.6%	19.2%	0.0%	13.5%	10.1%	23.0%
a16	54	31	3	97	57	30	5	277	40.0%	37.0%	31.3%	25.0%	68.8%	30.3%	34.5%
b	4	1	1	2	7	0	1	16	2.3%	2.7%	1.0%	8.3%	1.4%	3.7%	0.0%
c	43	41	2	42	63	32	7	230	33.2%	29.5%	41.4%	16.7%	29.8%	33.5%	36.8%
d	13	9	1	13	16	8	1	61	8.8%	8.9%	9.1%	8.3%	9.2%	8.5%	9.2%
a17	34	19	2	30	26	17	3	131	18.9%	23.3%	19.2%	16.7%	21.3%	13.8%	19.5%
b	1	3	1	3	5	0	1	14	2.0%	0.7%	3.0%	8.3%	2.1%	2.7%	0.0%
c	42	43	4	51	74	33	9	256	37.0%	28.8%	43.4%	33.3%	36.2%	39.4%	37.9%
d	19	12	1	18	20	14	1	85	12.3%	13.0%	12.1%	8.3%	12.8%	10.6%	16.1%
a18	110	61	8	116	130	63	17	505	73.0%	75.3%	61.6%	66.7%	82.3%	69.1%	72.4%
b	12	9	1	3	8	2	1	36	5.2%	8.2%	9.1%	8.3%	2.1%	4.3%	2.3%
c	9	16	1	9	21	9	1	66	9.5%	6.2%	16.2%	8.3%	6.4%	11.2%	10.3%
d	2	3	0	2	6	3		16	2.3%	1.4%	3.0%	0.0%	1.4%	3.2%	3.4%
a19	66	39	4	88	81	48	7	333	48.1%	45.2%	39.4%	33.3%	62.4%	43.1%	55.2%
b	5	7	3	8	13	4	3	43	6.2%	3.4%	7.1%	25.0%	5.7%	6.9%	4.6%
c	33	30	2	25	42	16	6	154	22.3%	22.6%	30.3%	16.7%	17.7%	22.3%	18.4%
d	12	10	1	5	16	5	1	50	7.2%	8.2%	10.1%	8.3%	3.5%	8.5%	5.7%
a20	104	62	6	118	135	63	13	501	72.4%	71.2%	62.6%	50.0%	83.7%	71.8%	72.4%
b	7	3	0	4	13	4		31	4.5%	4.8%	3.0%	0.0%	2.8%	6.9%	4.6%
c	24	23	3	13	23	12	5	103	14.9%	16.4%	23.2%	25.0%	9.2%	12.2%	13.8%
d	4	1	0	3	7	3	1	19	2.7%	2.7%	1.0%	0.0%	2.1%	3.7%	3.4%
a21	23	9	0	31	20	12		95	13.7%	15.8%	9.1%	0.0%	22.0%	10.6%	13.8%
b	5	4	0	1	2	1		13	1.9%	3.4%	4.0%	0.0%	0.7%	1.1%	1.1%
c	63	49	5	55	85	36	10	303	43.8%	43.2%	49.5%	41.7%	39.0%	45.2%	41.4%
d	15	13	1	12	23	17	1	82	11.8%	10.3%	13.1%	8.3%	8.5%	12.2%	19.5%
a22	14	9	0	14	4	4		45	6.5%	9.6%	9.1%	0.0%	9.9%	2.1%	4.6%
b	4	2	0	1	3	1		11	1.6%	2.7%	2.0%	0.0%	0.7%	1.6%	1.1%
c	70	51	5	65	95	42	9	337	48.7%	47.9%	51.5%	41.7%	46.1%	50.5%	48.3%
d	17	12	1	19	24	15	3	91	13.2%	11.6%	12.1%	8.3%	13.5%	12.8%	17.2%
a23	30	16	1	42	23	20		132	19.1%	20.5%	16.2%	8.3%	29.8%	12.2%	23.0%
b	14	6	0	8	18	6	1	53	7.7%	9.6%	6.1%	0.0%	5.7%	9.6%	6.9%
c	54	42	5	44	77	30	9	261	37.7%	37.0%	42.4%	41.7%	31.2%	41.0%	34.5%
d	13	12	1	16	19	11	3	75	10.8%	8.9%	12.1%	8.3%	11.3%	10.1%	12.6%
a24	16	8	1	22	13	10	1	71	10.3%	11.0%	8.1%	8.3%	15.6%	6.9%	11.5%
b	9	6	0	5	9	3	2	34	4.9%	6.2%	6.1%	0.0%	3.5%	4.8%	3.4%
c	62	41	5	60	84	34	8	294	42.5%	42.5%	41.4%	41.7%	42.6%	44.7%	39.1%
d	20	13	1	17	21	15	3	90	13.0%	13.7%	13.1%	8.3%	12.1%	11.2%	17.2%

a25	3	3	0	5		4		15	2.2%	2.1%	3.0%	0.0%	3.5%	0.0%	4.6%
b	0	0	0	0		0		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
c	26	29	2	27	46	18	7	155	22.4%	17.8%	29.3%	16.7%	19.1%	24.5%	20.7%
d	29	9	1	10		10	1	60	8.7%	19.9%	9.1%	8.3%	7.1%	0.0%	11.5%
a26	57	35	4	68	70	47	8	289	41.8%	39.0%	35.4%	33.3%	48.2%	37.2%	54.0%
b	1	0	0	0		0	3	4	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
c	47	33	4	35	43	19		181	26.2%	32.2%	33.3%	33.3%	24.8%	22.9%	21.8%
d	5	8	0	0	10	6		29	4.2%	3.4%	8.1%	0.0%	0.0%	5.3%	6.9%
a27	38	17	2	41	17	22	5	142	20.5%	26.0%	17.2%	16.7%	29.1%	9.0%	25.3%
b	2	2	0	1	2	0		7	1.0%	1.4%	2.0%	0.0%	0.7%	1.1%	0.0%
c	54	36	5	52	67	29	3	246	35.5%	37.0%	36.4%	41.7%	36.9%	35.6%	33.3%
d	8	12	0	2	17	11	2	52	7.5%	5.5%	12.1%	0.0%	1.4%	9.0%	12.6%
a28	82	49	6	102	96	50	13	398	57.5%	56.2%	49.5%	50.0%	72.3%	51.1%	57.5%
b	6	4	1	6	13	3	1	34	4.9%	4.1%	4.0%	8.3%	4.3%	6.9%	3.4%
c	22	22	2	12	23	7		88	12.7%	15.1%	22.2%	16.7%	8.5%	12.2%	8.0%
d	9	7	0	2	14	9	1	42	6.1%	6.2%	7.1%	0.0%	1.4%	7.4%	10.3%
a29	73	43	2	88	86	45	8	345	49.9%	50.0%	43.4%	16.7%	62.4%	45.7%	51.7%
b	16	6	2	11	20	10		65	9.4%	11.0%	6.1%	16.7%	7.8%	10.6%	11.5%
c	22	28	3	15	30	8	3	109	15.8%	15.1%	28.3%	25.0%	10.6%	16.0%	9.2%
d	11	5	0	7	12	10	2	47	6.8%	7.5%	5.1%	0.0%	5.0%	6.4%	11.5%
a30	25	2	0	25	8	8	2	70	10.1%	17.1%	2.0%	0.0%	17.7%	4.3%	9.2%
b	2	1	1	5	1	0		10	1.4%	1.4%	1.0%	8.3%	3.5%	0.5%	0.0%
c	54	51	5	50	78	37	7	282	40.8%	37.0%	51.5%	41.7%	35.5%	41.5%	42.5%
d	19	18	0	25	24	16	2	104	15.0%	13.0%	18.2%	0.0%	17.7%	12.8%	18.4%
a31	24	14	2	27	14	12		93	13.4%	16.4%	14.1%	16.7%	19.1%	7.4%	13.8%
b	4	1	0	6	3	3		17	2.5%	2.7%	1.0%	0.0%	4.3%	1.6%	3.4%
c	56	43	4	58	79	34	7	281	40.6%	38.4%	43.4%	33.3%	41.1%	42.0%	39.1%
d	16	16	1	15	19	14	3	84	12.1%	11.0%	16.2%	8.3%	10.6%	10.1%	16.1%
a32	27	16	0	29	30	18		120	17.3%	18.5%	16.2%	0.0%	20.6%	16.0%	20.7%
b	0	1	0	0	2	0		3	0.4%	0.0%	1.0%	0.0%	0.0%	1.1%	0.0%
c	60	51	6	65	77	39	7	305	44.1%	41.1%	51.5%	50.0%	46.1%	41.0%	44.8%
d	16	9	0	6	15	11	2	59	8.5%	11.0%	9.1%	0.0%	4.3%	8.0%	12.6%
a33	26	10	0	17	15	12		80	11.6%	17.8%	10.1%	0.0%	12.1%	8.0%	13.8%
b	2	3	0	4	3	0		12	1.7%	1.4%	3.0%	0.0%	2.8%	1.6%	0.0%
c	56	48	6	68	83	41	7	309	44.7%	38.4%	48.5%	50.0%	48.2%	44.1%	47.1%
d	17	8	0	9	16	13	2	65	9.4%	11.6%	8.1%	0.0%	6.4%	8.5%	14.9%
a34	5	4	0	8	6	1		24	3.5%	3.4%	4.0%	0.0%	5.7%	3.2%	1.1%
b	0	0	0	0		1		1	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%
c	28	27	1	35	48	21	5	165	23.8%	19.2%	27.3%	8.3%	24.8%	25.5%	24.1%
d	13	11	0	12	18	11	2	67	9.7%	8.9%	11.1%	0.0%	8.5%	9.6%	12.6%
a35	84	54	9	105	120	74	11	457	66.0%	57.5%	54.5%	75.0%	74.5%	63.8%	85.1%
b	4	2	0	2	5	0		13	1.9%	2.7%	2.0%	0.0%	1.4%	2.7%	0.0%
c	22	21	2	24	25	6	3	103	14.9%	15.1%	21.2%	16.7%	17.0%	13.3%	6.9%
d	2	4	0	2	5	0	1	14	2.0%	1.4%	4.0%	0.0%	1.4%	2.7%	0.0%
a36	22	18	1	20	23	14	5	103	14.9%	15.1%	18.2%	8.3%	14.2%	12.2%	16.1%
b	0	1	0	0	1	0		2	0.3%	0.0%	1.0%	0.0%	0.0%	0.5%	0.0%
c	80	48	4	71	84	44	8	339	49.0%	54.8%	48.5%	33.3%	50.4%	44.7%	50.6%
d	6	6	1	5	10	7		35	5.1%	4.1%	6.1%	8.3%	3.5%	5.3%	8.0%

a37	4	5	0	15	15	7		46	6.6%	2.7%	5.1%	0.0%	10.6%	8.0%	8.0%
b	1	0	0	1		0		2	0.3%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%
c	85	51	5	73	88	45	11	358	51.7%	58.2%	51.5%	41.7%	51.8%	46.8%	51.7%
d	10	13	1	8	13	11		56	8.1%	6.8%	13.1%	8.3%	5.7%	6.9%	12.6%
a38	41	26	0	42	39	21	6	175	25.3%	28.1%	26.3%	0.0%	29.8%	20.7%	24.1%
b	8	3	0	1	1	0		13	1.9%	5.5%	3.0%	0.0%	0.7%	0.5%	0.0%
c	57	40	5	53	70	38	8	271	39.2%	39.0%	40.4%	41.7%	37.6%	37.2%	43.7%
d	12	8	1	7	14	9		51	7.4%	8.2%	8.1%	8.3%	5.0%	7.4%	10.3%
a39	13	10	0	22	14	5	1	65	9.4%	8.9%	10.1%	0.0%	15.6%	7.4%	5.7%
b	2	3	0	0		0		5	0.7%	1.4%	3.0%	0.0%	0.0%	0.0%	0.0%
c	79	49	5	61	84	42	10	330	47.7%	54.1%	49.5%	41.7%	43.3%	44.7%	48.3%
d	7	10	1	9	15	16	1	59	8.5%	4.8%	10.1%	8.3%	6.4%	8.0%	18.4%
a40	12	7	0	16	11	10		56	8.1%	8.2%	7.1%	0.0%	11.3%	5.9%	11.5%
b	1	0	0	0	1	0		2	0.3%	0.7%	0.0%	0.0%	0.0%	0.5%	0.0%
c	78	76	6	73	90	46	10	379	54.8%	53.4%	76.8%	50.0%	51.8%	47.9%	52.9%
d	9	7	0	5	15	8	1	45	6.5%	6.2%	7.1%	0.0%	3.5%	8.0%	9.2%
a41	36	16	0	24	25	11	4	116	16.8%	24.7%	16.2%	0.0%	17.0%	13.3%	12.6%
b	2	0	0	2	1	0		5	0.7%	1.4%	0.0%	0.0%	1.4%	0.5%	0.0%
c	69	52	6	67	83	46	9	332	48.0%	47.3%	52.5%	50.0%	47.5%	44.1%	52.9%
d	7	7	0	6	14	9	1	44	6.4%	4.8%	7.1%	0.0%	4.3%	7.4%	10.3%
a42	15	8	0	12	18	7		60	8.7%	10.3%	8.1%	0.0%	8.5%	9.6%	8.0%
b	1	0	0	1	1	0		3	0.4%	0.7%	0.0%	0.0%	0.7%	0.5%	0.0%
c	76	55	6	73	86	47	10	353	51.0%	52.1%	55.6%	50.0%	51.8%	45.7%	54.0%
d	10	8	0	7	13	9	1	48	6.9%	6.8%	8.1%	0.0%	5.0%	6.9%	10.3%
a43	11	6	0	9	7	6	1	40	5.8%	7.5%	6.1%	0.0%	6.4%	3.7%	6.9%
b	1	0	0	2	1	0		4	0.6%	0.7%	0.0%	0.0%	1.4%	0.5%	0.0%
c	77	53	6	72	91	47	10	356	51.4%	52.7%	53.5%	50.0%	51.1%	48.4%	54.0%
d	11	9	0	8	14	11	1	54	7.8%	7.5%	9.1%	0.0%	5.7%	7.4%	12.6%
a44	43	16	1	12	21	7	2	102	14.7%	29.5%	16.2%	8.3%	8.5%	11.2%	8.0%
b	0	0	0	0		1		1	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%
c	32	21	2	38	43	24	4	164	23.7%	21.9%	21.2%	16.7%	27.0%	22.9%	27.6%
d	10	10	1	7	16	10	2	56	8.1%	6.8%	10.1%	8.3%	5.0%	8.5%	11.5%
a45	48	28	3	10	76	39	5	209	30.2%	32.9%	28.3%	25.0%	7.1%	40.4%	44.8%
b	0	2	0	21	2	0		25	3.6%	0.0%	2.0%	0.0%	14.9%	1.1%	0.0%
c	51	40	5	20	50	29	6	201	29.0%	34.9%	40.4%	41.7%	14.2%	26.6%	33.3%
d	7	7	0	0	13	4	1	32	4.6%	4.8%	7.1%	0.0%	0.0%	6.9%	4.6%
a46	55	23	4	67	54	29	7	239	34.5%	37.7%	23.2%	33.3%	47.5%	28.7%	33.3%
b	5	4	0	6	12	2		29	4.2%	3.4%	4.0%	0.0%	4.3%	6.4%	2.3%
c	46	42	5	40	52	29	4	218	31.5%	31.5%	42.4%	41.7%	28.4%	27.7%	33.3%
d	7	10	0	6	14	5	1	43	6.2%	4.8%	10.1%	0.0%	4.3%	7.4%	5.7%
a47	30	19	3	31	27	21	6	137	19.8%	20.5%	19.2%	25.0%	22.0%	14.4%	24.1%
b	1	0	0	1	1	0		3	0.4%	0.7%	0.0%	0.0%	0.7%	0.5%	0.0%
c	64	44	3	58	72	33	8	282	40.8%	43.8%	44.4%	25.0%	41.1%	38.3%	37.9%
d	8	12	0	8	21	11		60	8.7%	5.5%	12.1%	0.0%	5.7%	11.2%	12.6%
a48	31	17	0	27	20	15	4	114	16.5%	21.2%	17.2%	0.0%	19.1%	10.6%	17.2%
b	1	0	0	2	2	0		5	0.7%	0.7%	0.0%	0.0%	1.4%	1.1%	0.0%
c	71	55	6	62	84	47	11	336	48.6%	48.6%	55.6%	50.0%	44.0%	44.7%	54.0%
d	10	6	0	10	17	6	1	50	7.2%	6.8%	6.1%	0.0%	7.1%	9.0%	6.9%

a49	40	18	0	32	30	24	2	146	21.1%	27.4%	18.2%	0.0%	22.7%	16.0%	27.6%
b	6	3	0	3	6	1		19	2.7%	4.1%	3.0%	0.0%	2.1%	3.2%	1.1%
c	52	42	6	52	70	32	9	263	38.0%	35.6%	42.4%	50.0%	36.9%	37.2%	36.8%
d	8	13	0	12	18	10	2	63	9.1%	5.5%	13.1%	0.0%	8.5%	9.6%	11.5%
a50	3	3	0	3	1	1	1	12	1.7%	2.1%	3.0%	0.0%	2.1%	0.5%	1.1%
b	2	1	0	49		0		52	7.5%	1.4%	1.0%	0.0%	34.8%	0.0%	0.0%
c	81	52	6	34	89	47	10	319	46.1%	55.5%	52.5%	50.0%	24.1%	47.3%	54.0%
d	13	17	0	0	25	15	2	72	10.4%	8.9%	17.2%	0.0%	0.0%	13.3%	17.2%
a51	16	19	1	3	11	6	1	60	8.7%	11.0%	19.2%	8.3%	4.3%	5.9%	6.9%
b	1	0	0	1		0		2	0.3%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%
c	33	23	3	38	44	25	8	174	25.1%	22.6%	23.2%	25.0%	27.0%	23.4%	28.7%
d	10	11	0	11	22	12	1	67	9.7%	6.8%	11.1%	0.0%	7.8%	11.7%	13.8%
a52	28	21	2	52	39	23	6	171	24.7%	19.2%	21.2%	16.7%	36.9%	20.7%	26.4%
b	1	1	0	1		0		3	0.4%	0.7%	1.0%	0.0%	0.7%	0.0%	0.0%
c	66	41	6	49	67	35	7	271	39.2%	45.2%	41.4%	50.0%	34.8%	35.6%	40.2%
d	15	12	0	9	29	11	1	77	11.1%	10.3%	12.1%	0.0%	6.4%	15.4%	12.6%
a53	30	17	1	48	41	19	3	159	23.0%	20.5%	17.2%	8.3%	34.0%	21.8%	21.8%
b	1	0	0	1		0	1	3	0.4%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%
c	62	41	5	53	65	36	9	271	39.2%	42.5%	41.4%	41.7%	37.6%	34.6%	41.4%
d	14	14	0	9	31	17	1	86	12.4%	9.6%	14.1%	0.0%	6.4%	16.5%	19.5%
a54	20	8	0	35	28	7	1	99	14.3%	13.7%	8.1%	0.0%	24.8%	14.9%	8.0%
b	0	0	0	2	2	2		6	0.9%	0.0%	0.0%	0.0%	1.4%	1.1%	2.3%
c	63	50	6	47	79	39	9	293	42.3%	43.2%	50.5%	50.0%	33.3%	42.0%	44.8%
d	18	16	2	15	23	19	2	95	13.7%	12.3%	16.2%	16.7%	10.6%	12.2%	21.8%
a55	6	6	0	9	3	2	1	27	3.9%	4.1%	6.1%	0.0%	6.4%	1.6%	2.3%
b	0	1	0	4	1	1		7	1.0%	0.0%	1.0%	0.0%	2.8%	0.5%	1.1%
c	75	50	6	65	90	44	9	339	49.0%	51.4%	50.5%	50.0%	46.1%	47.9%	50.6%
d	19	17	2	14	27	18	2	99	14.3%	13.0%	17.2%	16.7%	9.9%	14.4%	20.7%
a56	13	8	1	17	8	4		51	7.4%	8.9%	8.1%	8.3%	12.1%	4.3%	4.6%
b	2	1	4	2	1	1		11	1.6%	1.4%	1.0%	33.3%	1.4%	0.5%	1.1%
c	70	51	5	61	80	41	9	325	47.0%	47.9%	51.5%	41.7%	43.3%	46.8%	47.1%
d	21	15	2	14	25	20	1	98	14.2%	14.4%	15.2%	16.7%	9.9%	13.3%	23.0%
a57	25	11	1	21	16	8	4	86	12.4%	17.1%	11.1%	8.3%	14.9%	8.5%	9.2%
b	1	1	0	6	1	1		10	1.4%	0.7%	1.0%	0.0%	4.3%	0.5%	1.1%
c	32	36	4	30	61	22	6	191	27.6%	21.9%	36.4%	33.3%	21.3%	32.4%	25.3%
d	18	13	1	13	25	19	1	90	13.0%	12.3%	13.1%	8.3%	9.2%	13.3%	21.8%
a58	12	10	0	11	8	6	2	49	7.1%	8.2%	10.1%	0.0%	7.8%	4.3%	6.9%
b	1	0	0	3	1	0		5	0.7%	0.7%	0.0%	0.0%	2.1%	0.5%	0.0%
c	70	51	7	67	96	46	10	347	50.1%	47.9%	51.5%	58.3%	47.5%	51.1%	52.9%
d	16	11	0	14	20	13	1	75	10.8%	11.0%	11.1%	0.0%	9.9%	10.6%	14.9%
a59	16	14	1	23	18	10	2	84	12.1%	11.0%	14.1%	8.3%	16.3%	9.6%	11.5%
b	2	2	0	3	3	0		10	1.4%	1.4%	2.0%	0.0%	2.1%	1.6%	0.0%
c	66	42	4	54	[illegible]	39	8	298	43.1%	45.2%	42.4%	33.3%	38.3%	45.2%	44.8%
d	18	17	2	14	[illegible]	18	3	92	13.3%	12.3%	17.2%	16.7%	9.9%	10.6%	20.7%
a60	17	6	1	13	19	3	4	63	9.1%	11.6%	6.1%	8.3%	9.2%	10.1%	3.4%
b	0	0	0	3	3	0		6	0.9%	0.0%	0.0%	0.0%	2.1%	1.6%	0.0%
c	64	51	5	63	81	40	9	313	45.2%	43.8%	51.5%	41.7%	44.7%	43.1%	46.0%
d	23	16	2	16	23	20	1	101	14.6%	15.8%	16.2%	16.7%	11.3%	12.2%	23.0%

a61	14	9	0	12	14	5		54	7.8%	9.6%	9.1%	0.0%	8.5%	7.4%	5.7%
b	0	0	0	2		0		2	0.3%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%
c	83	50	5	128	87	39	9	401	57.9%	56.8%	50.5%	41.7%	90.8%	46.3%	44.8%
d	20	13	2	15	26	20	1	97	14.0%	13.7%	13.1%	16.7%	10.6%	13.8%	23.0%
a62	17	7	0	7	16	7		54	7.8%	11.6%	7.1%	0.0%	5.0%	8.5%	8.0%
b	1	0	0	0		0		1	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
c	30	33	5	43	56	21	6	194	28.0%	20.5%	33.3%	41.7%	30.5%	29.8%	24.1%
d	18	14	0	14	29	17	2	94	13.6%	12.3%	14.1%	0.0%	9.9%	15.4%	19.5%
a63	22	27	1	59	33	34	4	180	26.0%	15.1%	27.3%	8.3%	41.8%	17.6%	39.1%
b	4	14	0	1	6	1		26	3.8%	2.7%	14.1%	0.0%	0.7%	3.2%	1.1%
c	70	22	6	42	67	22	8	237	34.2%	47.9%	22.2%	50.0%	29.8%	35.6%	25.3%
d	9	9	1	13	19	12	1	64	9.2%	6.2%	9.1%	8.3%	9.2%	10.1%	13.8%
a64	24	8	0	16	8	11		67	9.7%	16.4%	8.1%	0.0%	11.3%	4.3%	12.6%
b	3	15	1	1	2	2		24	3.5%	2.1%	15.2%	8.3%	0.7%	1.1%	2.3%
c	73	37	5	65	85	41	10	316	45.7%	50.0%	37.4%	41.7%	46.1%	45.2%	47.1%
d	13	12	1	15	23	12	1	77	11.1%	8.9%	12.1%	8.3%	10.6%	12.2%	13.8%
a65	7	3	0	14	12	3		39	5.6%	4.8%	3.0%	0.0%	9.9%	6.4%	3.4%
b	0	0	0	0		0		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
c	78	50	5	63	82	44	10	332	48.0%	53.4%	50.5%	41.7%	44.7%	43.6%	50.6%
d	11	18	1	18	22	17	1	88	12.7%	7.5%	18.2%	8.3%	12.8%	11.7%	19.5%
a66	21	14	0	20	25	9	3	92	13.3%	14.4%	14.1%	0.0%	14.2%	13.3%	10.3%
b	1	0	0	1	1	0		3	0.4%	0.7%	0.0%	0.0%	0.7%	0.5%	0.0%
c	74	48	6	63	75	46	10	322	46.5%	50.7%	48.5%	50.0%	44.7%	39.9%	52.9%
d	10	13	1	15	22	11	2	74	10.7%	6.8%	13.1%	8.3%	10.6%	11.7%	12.6%
a67	27	10	0	26	22	13	3	101	14.6%	18.5%	10.1%	0.0%	18.4%	11.7%	14.9%
b	1	0	0	1	1	0		3	0.4%	0.7%	0.0%	0.0%	0.7%	0.5%	0.0%
c	70	49	6	61	79	45	10	320	46.2%	47.9%	49.5%	50.0%	43.3%	42.0%	51.7%
d	11	15	1	15	21	10	2	75	10.8%	7.5%	15.2%	8.3%	10.6%	11.2%	11.5%
a68	13	11	0	14	10	9	2	59	8.5%	8.9%	11.1%	0.0%	9.9%	5.3%	10.3%
b	1	0	0	1		0		2	0.3%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%
c	73	50	6	60	86	43	11	329	47.5%	50.0%	50.5%	50.0%	42.6%	45.7%	49.4%
d	12	16	1	17	22	10	1	79	11.4%	8.2%	16.2%	8.3%	12.1%	11.7%	11.5%
a69	17	6	0	15	13	5	2	58	8.4%	11.6%	6.1%	0.0%	10.6%	6.9%	5.7%
b	4	0	0	1	5	1	1	12	1.7%	2.7%	0.0%	0.0%	0.7%	2.7%	1.1%
c	68	51	6	65	78	42	11	321	46.4%	46.6%	51.5%	50.0%	46.1%	41.5%	48.3%
d	13	17	1	19	22	18		90	13.0%	8.9%	17.2%	8.3%	13.5%	11.7%	20.7%
a70	4	1	0	1	1	2		9	1.3%	2.7%	1.0%	0.0%	0.7%	0.5%	2.3%
b	0	0	0	0		0		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
c	78	53	6	71	90	45	11	354	51.2%	53.4%	53.5%	50.0%	50.4%	47.9%	51.7%
d	15	18	1	19	25	17	1	96	13.9%	10.3%	18.2%	8.3%	13.5%	13.3%	19.5%
a71	4	3	0	5	5	0	1	18	2.6%	2.7%	3.0%	0.0%	3.5%	2.7%	0.0%
b	0	1	0	1	2	0		4	0.6%	0.0%	1.0%	0.0%	0.7%	1.1%	0.0%
c	79	50	6	69	81	45	11	341	49.3%	54.1%	50.5%	50.0%	48.9%	43.1%	51.7%
d	13	44	1	19	24	18	1	120	17.3%	8.9%	44.4%	8.3%	13.5%	12.8%	20.7%
a72	14	7	0	19	16	14	1	71	10.3%	9.6%	7.1%	0.0%	13.5%	8.5%	16.1%
b	3	2	0	2		2		9	1.3%	2.1%	2.0%	0.0%	1.4%	0.0%	2.3%
c	76	40	6	57	81	32	10	302	43.6%	52.1%	40.4%	50.0%	40.4%	43.1%	36.8%
d	9	18	1	17	22	13	1	81	11.7%	6.2%	18.2%	8.3%	12.1%	11.7%	14.9%

a73	5	3	0	4	1	1	1	15	2.2%	3.4%	3.0%	0.0%	2.8%	0.5%	1.1%
b	0	1	0	0	1	1		3	0.4%	0.0%	1.0%	0.0%	0.0%	0.5%	1.1%
c	83	50	6	69	91	44	10	353	51.0%	56.8%	50.5%	50.0%	48.9%	48.4%	50.6%
d	9	18	1	18	23	17	1	87	12.6%	6.2%	18.2%	8.3%	12.8%	12.2%	19.5%
a74	15	10	0	25	11	12	1	74	10.7%	10.3%	10.1%	0.0%	17.7%	5.9%	13.8%
b	3	2	0	2	2	0		9	1.3%	2.1%	2.0%	0.0%	1.4%	1.1%	0.0%
c	74	123	6	56	81	40	10	390	56.4%	50.7%	124.2%	50.0%	39.7%	43.1%	46.0%
d	11	14	1	16	22	12	1	77	11.1%	7.5%	14.1%	8.3%	11.3%	11.7%	13.8%
a75	24	7	1	11	10	9	1	63	9.1%	16.4%	7.1%	8.3%	7.8%	5.3%	10.3%
b	0	0	0	1		1		2	0.3%	0.0%	0.0%	0.0%	0.7%	0.0%	1.1%
c	40	154	4	35	58	28	8	327	47.3%	27.4%	155.6%	33.3%	24.8%	30.9%	32.2%
d	12	14	1	19	26	14	1	87	12.6%	8.2%	14.1%	8.3%	13.5%	13.8%	16.1%
a76	25	13	0	28	26	9	3	104	15.0%	17.1%	13.1%	0.0%	19.9%	13.8%	10.3%
b	3	0	0	3	1	0		7	1.0%	2.1%	0.0%	0.0%	2.1%	0.5%	0.0%
c	68	52	5	63	77	46	1	312	45.1%	46.6%	52.5%	41.7%	44.7%	41.0%	52.9%
d	11	12	0	9	23	11	1	67	9.7%	7.5%	12.1%	0.0%	6.4%	12.2%	12.6%
a77	26	26	1	37	23	12	3	128	18.5%	17.8%	26.3%	8.3%	26.2%	12.2%	13.8%
b	3	0	1	2	7	0		13	1.9%	2.1%	0.0%	8.3%	1.4%	3.7%	0.0%
c	60	46	3	50	65	41	9	274	39.6%	41.1%	46.5%	25.0%	35.5%	34.6%	47.1%
d	15	24	1	13	28	11	1	93	13.4%	10.3%	24.2%	8.3%	9.2%	14.9%	12.6%
a78	21	10	1	18	17	17	2	86	12.4%	14.4%	10.1%	8.3%	12.8%	9.0%	19.5%
b	1	12	1	5	5	4	2	30	4.3%	0.7%	12.1%	8.3%	3.5%	2.7%	4.6%
c	70	47	3	59	73	33	10	295	42.6%	47.9%	47.5%	25.0%	41.8%	38.8%	37.9%
d	12	15	1	18	27	12		85	12.3%	8.2%	15.2%	8.3%	12.8%	14.4%	13.8%
a79	1	0	0	4	3	5		13	1.9%	0.7%	0.0%	0.0%	2.8%	1.6%	5.7%
b	0	0	0	0	1	0		1	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%
c	83	54	6	74	84	46	11	358	51.7%	56.8%	54.5%	50.0%	52.5%	44.7%	52.9%
d	14	17	0	12	28	13	1	85	12.3%	9.6%	17.2%	0.0%	8.5%	14.9%	14.9%
a80	11	2	0	21	19	16	2	71	10.3%	7.5%	2.0%	0.0%	14.9%	10.1%	18.4%
b	0	0	0	2	3	2		7	1.0%	0.0%	0.0%	0.0%	1.4%	1.6%	2.3%
c	77	55	5	60	74	32	10	313	45.2%	52.7%	55.6%	41.7%	42.6%	39.4%	36.8%
d	12	17	1	13	29	14	1	87	12.6%	8.2%	17.2%	8.3%	9.2%	15.4%	16.1%
a81	8	1	0	7	7	0	1	24	3.5%	5.5%	1.0%	0.0%	5.0%	3.7%	0.0%
b	1	0	0	1	1	0		3	0.4%	0.7%	0.0%	0.0%	0.7%	0.5%	0.0%
c	79	51	6	70	82	45	11	344	49.7%	54.1%	51.5%	50.0%	49.6%	43.6%	51.7%
d	15	20	0	13	27	17	1	93	13.4%	10.3%	20.2%	0.0%	9.2%	14.4%	19.5%
a82	0	3	0	1		1		5	0.7%	0.0%	3.0%	0.0%	0.7%	0.0%	1.1%
b	0	0	0	1	1	0		2	0.3%	0.0%	0.0%	0.0%	0.7%	0.5%	0.0%
c	123	48	6	73	85	44	11	390	56.4%	84.2%	48.5%	50.0%	51.8%	45.2%	50.6%
d	15	18	0	14	29	18	1	95	13.7%	10.3%	18.2%	0.0%	9.9%	15.4%	20.7%
a83	7	7	2	11	9	1		37	5.3%	4.8%	7.1%	16.7%	7.8%	4.8%	1.1%
b	6	0	0	0	1	0		7	1.0%	4.1%	0.0%	0.0%	0.0%	0.5%	0.0%
c	76	50	5	70	80	44	11	336	48.6%	52.1%	50.5%	41.7%	49.6%	42.6%	50.6%
d	12	18	0	13	26	18	1	88	12.7%	8.2%	18.2%	0.0%	9.2%	13.8%	20.7%
a84	9	5	0	5	5	1	1	26	3.8%	6.2%	5.1%	0.0%	3.5%	2.7%	1.1%
b	2	0	0	0	1	0		3	0.4%	1.4%	0.0%	0.0%	0.0%	0.5%	0.0%
c	50	35	4	38	57	28	9	221	31.9%	34.2%	35.4%	33.3%	27.0%	30.3%	32.2%
d	13	17	0	14	26	16	1	87	12.6%	8.9%	17.2%	0.0%	9.9%	13.8%	18.4%

a85	22	11	0	11	7	6	2	59	8.5%	15.1%	11.1%	0.0%	7.8%	3.7%	6.9%
b	0	0	0	1		0		1	0.1%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%
c	78	55	7	74	90	48	10	362	52.3%	53.4%	55.6%	58.3%	52.5%	47.9%	55.2%
d	14	10	0	11	18	13	1	67	9.7%	9.6%	10.1%	0.0%	7.8%	9.6%	14.9%
a86	15	10	1	22	14	9	3	74	10.7%	10.3%	10.1%	8.3%	15.6%	7.4%	10.3%
b	2	3	0	1	2	0		8	1.2%	1.4%	3.0%	0.0%	0.7%	1.1%	0.0%
c	71	50	5	59	79	42	9	315	45.5%	48.6%	50.5%	41.7%	41.8%	42.0%	48.3%
d	15	13	1	13	25	16	1	84	12.1%	10.3%	13.1%	8.3%	9.2%	13.3%	18.4%
a87	7	3	0	4	8	2		24	3.5%	4.8%	3.0%	0.0%	2.8%	4.3%	2.3%
b	1	0	0	0		0		1	0.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
c	78	56	7	72	86	42	10	351	50.7%	53.4%	56.6%	58.3%	51.1%	45.7%	48.3%
d	17	15	0	14	21	20	1	88	12.7%	11.6%	15.2%	0.0%	9.9%	11.2%	23.0%
a88	8	3	1	20	16	11	2	61	8.8%	5.5%	3.0%	8.3%	14.2%	8.5%	12.6%
b	13	0	0	0		0		13	1.9%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%
c	64	129	6	65	80	40	9	393	56.8%	43.8%	130.3%	50.0%	46.1%	42.6%	46.0%
d	9	12	0	13	21	15		70	10.1%	6.2%	12.1%	0.0%	9.2%	11.2%	17.2%
a89	2	2	0	2	6	0		12	1.7%	1.4%	2.0%	0.0%	1.4%	3.2%	0.0%
b	0	0	0	0		0		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
c	82	55	7	79	87	46	11	367	53.0%	56.2%	55.6%	58.3%	56.0%	46.3%	52.9%
d	12	15	0	12	22	18		79	11.4%	8.2%	15.2%	0.0%	8.5%	11.7%	20.7%
a90	12	6	1	11	17	9	2	58	8.4%	8.2%	6.1%	8.3%	7.8%	9.0%	10.3%
b	3	2	1	2	3	0		11	1.6%	2.1%	2.0%	8.3%	1.4%	1.6%	0.0%
c	74	52	5	67	81	40	8	327	47.3%	50.7%	52.5%	41.7%	47.5%	43.1%	46.0%
d	16	14	1	16	21	16	1	85	12.3%	11.0%	14.1%	8.3%	11.3%	11.2%	18.4%
a91	8	3	0	5	2	2	1	21	3.0%	5.5%	3.0%	0.0%	3.5%	1.1%	2.3%
b	1	0	0	1		0		2	0.3%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%
c	48	38	4	43	59	30	8	230	33.2%	32.9%	38.4%	33.3%	30.5%	31.4%	34.5%
d	17	16	0	12	20	15	1	81	11.7%	11.6%	16.2%	0.0%	8.5%	10.6%	17.2%
a92	87	43	6	94	102	49	11	392	56.6%	59.6%	43.4%	50.0%	66.7%	54.3%	56.3%
b	61	38	4	43	78	23	8	255	36.8%	41.8%	38.4%	33.3%	30.5%	41.5%	26.4%
c	32	23	1	18	41	11	3	129	18.6%	21.9%	23.2%	8.3%	12.8%	21.8%	12.6%
d	37	24	2	23	46	23	4	159	23.0%	25.3%	24.2%	16.7%	16.3%	24.5%	26.4%
e	20	15	2	11	10	10	2	70	10.1%	13.7%	15.2%	16.7%	7.8%	5.3%	11.5%
a93	41	28	1	50	41	30	4	195	28.2%	28.1%	28.3%	8.3%	35.5%	21.8%	34.5%
b	87	51	3	68	83	53	10	355	51.3%	59.6%	51.5%	25.0%	48.2%	44.1%	60.9%
c	47	32	4	46	66	30	8	233	33.7%	32.2%	32.3%	33.3%	32.6%	35.1%	34.5%
d	33	27	6	31	59	12	5	173	25.0%	22.6%	27.3%	50.0%	22.0%	31.4%	13.8%
e	6	4	0	3	4	3		20	2.9%	4.1%	4.0%	0.0%	2.1%	2.1%	3.4%
94a	118	80	11	133	161	72	16	591	85.4%	80.8%	80.8%	91.7%	94.3%	85.6%	82.8%
b	50	26	2	20	45	47	5	195	28.2%	34.2%	26.3%	16.7%	14.2%	23.9%	54.0%
c	46	14	1	27	30	33	6	157	22.7%	31.5%	14.1%	8.3%	19.1%	16.0%	37.9%
d	81	40	3	49	88	48	8	317	45.8%	55.5%	40.4%	25.0%	34.8%	46.8%	55.2%
e	9	7	0	3	9	5		33	4.8%	6.2%	7.1%	0.0%	2.1%	4.8%	5.7%
95a	34	12	1	24	42	15	5	133	19.2%	23.3%	12.1%	8.3%	17.0%	22.3%	17.2%
b	23	11	0	23	29	12		98	14.2%	15.8%	11.1%	0.0%	16.3%	15.4%	13.8%
c	10	7	1	5	13	7	4	47	6.8%	6.8%	7.1%	8.3%	3.5%	6.9%	8.0%
d	8	5	0	9	14	3	2	41	5.9%	5.5%	5.1%	0.0%	6.4%	7.4%	3.4%
e	6	2	0	3	1	2		14	2.0%	4.1%	2.0%	0.0%	2.1%	0.5%	2.3%

96a	29	19	6	28	39	16	4	141	20.4%	19.9%	19.2%	50.0%	19.9%	20.7%	18.4%
b	46	29	2	56	59	21	8	221	31.9%	31.5%	29.3%	16.7%	39.7%	31.4%	24.1%
c	20	20	1	28	39	22	2	132	19.1%	13.7%	20.2%	8.3%	19.9%	20.7%	25.3%
d	18	4	1	14	11	15		63	9.1%	12.3%	4.0%	8.3%	9.9%	5.9%	17.2%
e	5	4	0	2	7	3		21	3.0%	3.4%	4.0%	0.0%	1.4%	3.7%	3.4%
97a	6	12	3	9	28	2	1	61	8.8%	4.1%	12.1%	25.0%	6.4%	14.9%	2.3%
b	141	81	8	133	159	85	19	626	90.5%	96.6%	81.8%	66.7%	94.3%	84.6%	97.7%
98a	17	4	0	3	7	4		35	4.4%	10.8%	3.7%	0.0%	1.5%	3.6%	4.3%
b	49	44	5	40	70	10	11	229	29.0%	31.2%	40.7%	35.7%	19.9%	36.1%	10.6%
c	28	24	6	36	68	17	4	183	23.2%	17.8%	22.2%	42.9%	17.9%	35.1%	18.1%
d	11	9	0	36	13	14	1	84	10.6%	7.0%	8.3%	0.0%	17.9%	6.7%	14.9%
e	39	18	0	30	26	41	3	157	19.9%	24.8%	16.7%	0.0%	14.9%	13.4%	43.6%
99a	1	2	1	3	2	0	1	10	1.3%	0.6%	1.9%	7.1%	1.5%	1.0%	0.0%
b	7	3	0	9	10	1	1	31	3.9%	4.5%	2.8%	0.0%	4.5%	5.2%	1.1%
c	28	5	1	33	34	31	2	134	17.0%	17.8%	4.6%	7.1%	16.4%	17.5%	33.0%
d	2	4	0	5		1		12	1.5%	1.3%	3.7%	0.0%	2.5%	0.0%	1.1%
e	4	3	0	7	10	0		24	3.0%	2.5%	2.8%	0.0%	3.5%	5.2%	0.0%
100.	21	26	3	11	15	4	2	82	10.4%	13.4%	24.1%	21.4%	5.5%	7.7%	4.3%
b	21	14	0	14	34	8	4	95	12.0%	13.4%	13.0%	0.0%	7.0%	17.5%	8.5%
c	58	36	5	62	78	34	12	285	36.1%	36.9%	33.3%	35.7%	30.8%	40.2%	36.2%
d	13	16	0	12	12	12		65	8.2%	8.3%	14.8%	0.0%	6.0%	6.2%	12.8%

RESPONSES TO QUESTIONS BY COUNTY

The information was available on a county-by-county basis, so we thought that there may be some interest for readers to see what the responses were to many of the specific questions. In order for you to interpret the information, please locate your county number in the chart provided in the Introduction section. The responses to each question will be listed next to the appropriate county number.

Responses to questions 92, 94, 96, 101, and 102 should especially be of interest on a county-by-county basis:

92. Which of the following does your company feel is an obstacle to microcomputer productivity?

San Bernardino County (#36) educators might be interested in knowing that one response indicated that computer intimidating employees were an obstacle to microcomputer productivity. Perhaps their courses could be marketed stressing the friendly one-to-one approach available.

94. Which of the following does your company use to train employees for microcomputer applications?

San Diego (#37) educators might be interested in knowing that "seminars" are another method of obtaining training.

96. If your company trains employees for microcomputer applications, rate your satisfaction with the current method(s) of training.

Answers to this question could provide insight to need for computer training.

101. Do you have any further comments on your satisfaction or dissatisfaction with current employee training for microcomputer applications?

Humboldt County (#12), for example, might be interested in knowing that one response was "I would be interested in more short term (2-4 weeks) evening or weekend courses, especially in spreadsheets."

102. What courses would your company like to see your local community college offer in the future?

Orange County (#30) might be interested in knowing that there were responses requested more Macintosh courses.

County-by-county response to questions with an "Other" option

"Other" response by County Code to Question 5.

04	Atari
09	UNIX mini-frame
12	Morrow (old)
12	Grid (notebook
19	AGI-clones
19	Mini-computer
19	Atari
19	Apollo Reservations Sys.
19	Solid Ink
19	Apple
19	Compac
19	General Automation-Zebra
19	UNIX operating system
19	Apple
34	H-P
34	Dell and Wang
34	Wang
36	C. ITOH
37	Toshiba Lap Top Compaq
37	Mainframe (System is contra[illegible]d). VAX
37	IBM compatible
37	SUN
43	Mainframe
43	F1000 SE Toshiba
43	Hewlett-Packard
43	H-P
49	H-P Vectra and Workstations
52	Merit-Register
52	Merit-Register
52	Merit-Register
52	Merit-Register
52	MCR
57	VAX

"Other" response by County Code to Question 11: Printers.

12	H8 Deskwriter
19	Thermal portable
19	Ink Jet
30	Canon Bubble Jet
30	Ink Jet
34	Line Printer
37	scanner
37	A Hewlett Packard Paint Jet
38	Linotronic
43	Ink Jet
43	Bubble Jet-BJ-10E -Canon-
47	ink jet/ color
48	InkJet
48	Scanner or Digitizer

49 Ink Jet
49 Paint Jets
52 NCR

"Other" response by County Code to Question 5: peripheral devices.
01 Video Interface
09 Digitizer
12 Scanner on ImageWriter
34 Digitizers
37 Imaging Scanners and Optical Disk Jukebox
37 Digitizer
48 ScanTron scanners for training grading
49 Digitizer

"Other" response by County Code to Question 34: operating systems and environment.
01 Novell
09 HP 3000 / MPE XL
12 CPM (old)
19 IBM automated system
19 GEM
19 Apollo
19 Digital, Deck
19 Super Dos
30 GeoWorks
34 Desqview
37 Dr. Dos-6
37 Novell
41 Excel, Word
47 MS-Windows 3.0
48 MVS, CICS, Primos
48 Amiga

"Other" response by County Code to Question 44: word processing programs.
07 Enable
09 Word Perfect for Windows
09 Word Perfect, UNIX
09 Multimate 4.0
10 Q & A
12 Lotus-Works
12 Claris Works
12 Word for Windows
12 XyWrite III+
12 Brief
12 PRS Pro Write
19 First Choice
19 Symphony 2+
19 Microgratx Designer
19 specialized
19 Word for Windows
19 WordPerfect, Atari
19 Pro-Write
19 Word for Windows 2.0
19 VOLKSwriter
19 Word II

19 Multimate for Dos
19 Zerox
19 Q & A
19 Jet
19 Professional Write
19 Q & A
19 Word for Windows
19 Desk Top Pub.
19 Multimate Advantage II
19 Multimate
21 WP for Windows
21 AMI Pro, Professions Write Plus
21 Enable
27 Word/Word 2 for Window.
27 WordPerfect VAX
28 Claris Works
30 FullWrite for Mac
30 WP for Windows
30 Words for Windows
30 AMI Pro 2
30 AMNI-Pro
34 Enable
34 Windows:Word, WP, AMI Pro
34 Enable
34 Q & A
34 Professional Write
34 Word for Windows
37 Word Perfect for Windows
37 Word Perfect Windows
37 Q & A
37 Word for Windows
37 XyWrite
38 GeoWorks
41 AMI Pro 2.0
41 Q & A
42 Word Perfect for PC/DOS
43 XyWrite for Dos
43 AMI Pro
43 H-P's own
43 Word, Excel and Power Point for Windows
48 Samna (phasing out), OPN
48 SAMNA, being replaced by Word Perfect
48 Word for Windows
48 PC-Write (Dyes), ProWrite (Amiga)
48 First Choice
48 First Choice
48 Q & A write
48 Word for Windows
49 Framework III
52 Yardi
56 Enable OA, Multimate
56 Freestyle

"Other" response by County Code to Question 51: spreadsheet software.

01 PSF
04 Works
07 Enable
09 SuperCalc- 1 machine
09 Quattro
09 SuperCalc-Dos
10 Always Graphics on Lotus
12 Lotus-Works
12 MS/Works and Claris Works
12 Twin
12 SuperCalc 4/5
12 Rags to Riches
19 Symphony
19 specialized
19 Quattro
19 Pacioli
19 Twin
19 SwiftCalc Atari
19 Works for Mac
19 DeskMate spreadsheet
19 Multiplan
19 Franklin
21 Enable
28 Lotus 1,2,3 Mac
30 Lotus 1,2,3 Windows
34 Enable
34 Enable
34 Q & A
34 Multiplan
34 Multiplan Dos
37 Q & A
37 Quicken
37 Excel for Windows
37 20/20
37 Symphony
38 Solomon
38 GeoWorks
40 Works Spreadsheet
43 Excel for Windows
48 OPN
48 SuperCalc
48 Excel for Windows
48 First Choice
48 Ability
49 Framework III
49 Resolve
49 SCO Professional
49 ACCPAC Simply Accounting
52 Yardi
56 Enable OA

"Other" response by County Code to Question 57: database software.
04 Works
07 Q & A

07 Rbase
07 Enable
09 Alpha Four
09 Alpha 4
09 Rbase, Telemagic.
12 Lotus-works
12 NuBase
12 MS/Works and Claris Works
12 Clarion
12 Dbase II+
15 Realworld
19 Sybase
19 Customized software
19 Business program written in dbase IV runs in Foxbase
19 Clipper 5.0
19 Rbase
19 Nutshell
19 Manager Atari
19 Rbase
19 Pro-File
19 Printshop
19 Unify-UNIX based
19 File Express
19 Q & A
19 Calc
19 Rbase
19 Filemaker
21 Data Boss
28 4th Dimension
30 Alpha 4
30 Alpha 4
30 Data Perfect
34 Enable
34 Q & A
34 Rbase
36 Southware accounting software.
37 Enable
37 FileMaker Pro
37 Fox Base Run Time
37 Rbase
37 Q & A
37 Q & A
37 Q & A, Superbase
37 Rbase
38 Sybase
38 FileMaker
38 Geo Draw
38 Focus
38 FileMaker Pro
38 Fox Pro
40 Works Dbase
41 Fox Pro 2.0, Alpha IV ver. 2
42 4-D
43 PC-File

43 FileMaker
43 Panorama Spreadsheet
43 Ingres
43 FileMaker; File
48 OPN
48 Clipper, Focus, Informix
48 Rbase
48 Pick
48 Rbase
48 Omni 7
49 @Base
49 Filepro
52 Yardi34

"Other" response by County Code to Question 62: file management software.

07 Enable
07 Pathmate
09 Windows
09 Xtree
12 Canvas,Videopaint, Image.
12 PC Tools, PC Shells
12 Xtree
19 Norton
19 Q & A
19 PC Tools
19 Customized software
19 specialized
19 Xtree Pro
19 CP-back up
19 QDos
19 Under Windows
19 Ckrion
19 Norton
19 Xtree
21 Data Boss
21 Enable
27 Q & A
30 Dbase 4
33 Norton Util.
34 Q & A
36 Novel Netware 3.11
37 Norton Desktop
37 Xtree
37 Concordance
37 Q & A
37 QDos, Norton Utilities
37 Xtree Gold
37 PS5
37 PC File
38 Norton Desktop
41 AMS
43 Xtree
43 Fastback
47 XTREE Pro, Windows, PC Tools

48 OPN
48 Program Mgx. Xtree
48 PC-Tools
49 Word Perfect Office
49 FileMaker Pro
49 1Dirplus

"Other" response by County Code to Question 75: graphics software.

01 Claris Cad
01 Tempra
07 Autocad
09 Express
12 Micro-Graphx
19 Persuasion Windows Draw
19 Word for Windows
19 specialized
19 Power Point
19 NED, Degas
19 CadVance (Cad)
19 Photoshop
19 F-3 forms design
21 Windows Draw
21 Deluxe Paint
30 Gerber Sprint 3
30 Claris Cad
30 Harvard Modelshop
30 Power Point
33 Print Shop
34 Autocad and Micro Station
34 Canvas
34 Charts, Labels Unlimited
37 Aldus freehand
37 Power Point
37 DesignCad II
37 Power Point
37 Microsoft Designer
37 Designer
37 ORG Plus
37 Frame
37 PC Paintbrush
37 Power Pint
38 PageMaker 4.0
38 By Design
40 PageMaker
43 Paint Shop
43 Power Point
47 Paint shop
48 OPN
48 Page Maker
48 Deluxe Paint IV (Amiga)
48 Auto Sketch
48 Autocad
48 Fox Graph
48 Works for Windows

49 Applause II
49 EGS, ME30 and Drawing Gallery all by H-P

"Other" response by County Code to Question 84: desktop publishing programs.

01 Express
04 Microsoft Publish
07 Microsoft Pub.
12 Ready, set, go.
12 AMI-Pro
12 Publish It
19 specialized
19 Paintbrush
19 Canvas
19 Calamus St
19 Publish-It
19 Windows Publisher
19 F-3
19 Printshop
30 AMI Pro 2
33 Power Point (Microsoft)
34 Express Pub.
34 HP Drawing Gallery
37 Microsoft Publisher
38 Word for Window
38 db Publisher
41 Express Publisher Dyes, Express Publisher Windows
42 Aldus Freehand
43 GEM
43 Interleaf
48 OPN
48 MS-Word, WRSI, WPWIS
48 Windows Draw
48 Works for Windows
56 New Printshop

"Other" response by County Code to Question 91: integrated software.

12 Claris Works
19 specialized
19 Compusourse Contrac II
28 Claris Works
37 MS Office
38 GeoWorks
43 Microsoft Office
48 OPN
48 Newwave

"Other" response by County Code to Question 92: Which does your company feel is an obstacle to microcomputer productivity?.

07 Not enough computers- we are still purchasing
07 Not enough memory to accommodate all the programs we want to run
07 Proliferation of software-no standard
09 Afraid of change / technology

10 Fast changing technology
12 Employee resistance
19 Lack of knowledge above 10 basic DOS commands
19 Software cannot expand
19 no time to learn extra features
19 Time to develop and learn applications.
19 Incompatible software packages
19 Time required to train
19 Basic typing
19 Funding
21 Can't afford to buy one.
30 Many times cannot justify purchase and price because we may not use it enough.
30 Inadequate training in Business basics (i.e., letter set up, report setup.)
34 Software upgrades
34 Time for learning process.
34 Time to learn
34 Not enough equipment
34 People don't see the need, they don't appreciate all the applications.
34 Hardware limitations, drivers interrupts, etc.
34 Keeping up with change
35 Not enough programs
36 Computer intimidated employees.
37 Time allocated to training
37 Time to learn
37 Rapidly changing software versions
37 Resistance to change and budget constraints.
37 Lack of dept. funds
37 Lack of knowledge of Dyes and printer fonts and usage.
37 Poorly written manuals.
37 Cost
37 Continual upgrading of software
37 Incompatibility of equipment
37 Time
38 We have no employees
38 Difficulty in changing form paper procedures to automated way of doing business.
42 Interhac/ organizational structure
42 Lack of motivation to change.
43 Poor tutorials both on and off lie.
43 Cost
43 Obsolete computers
43 Inadequate computer Power
43 Budget
43 hardware limitations
47 Lack of uniform systems/programs within company
48 Sufficient time
48 Time available for training
48 Time to learn
48 Inability to buy current versions of software.
49 Cost of good equipment
52 Programmed texts
56 too much software

"Other" response by County Code to Question 92: How does your compoany evaluate a potential employee's microcomputer skills?

12 Computerization is new to us.
19 We started with these employees haven't need to hire.
19 Sample of work
19 Samples
19 On job review
30 No specialists in co.
34 In house hiring
34 Train as needed part-time help.
36 We use hands on "ETS" validated PC Testing software
37 On the job training
37 Use Temp Employee before hire
38 Portfolio
48 Performed at corporate level
48 Transcripts for school
49 no employees

"Other" response by County Code to Question 94: Which of the following does your company use to train employees for microcmoputer applications?

07 Adult education classes.
19 ROP
36 On-site proficient employees train other employees
37 Ask an expert
37 Seminars
43 County trains; classes always are filled
43 Other employees train each other.
43 Require some computer skills.
48 corporate trainers
48 Seminars and workshops

"Other" response by County Code to Question 101: Do you have any further comments on your satisfaction of dissatisfaction with current employee training for microcomputer applications?

07 There are not enough classes tailored to our industry
07 Would like to see broader range of graphics and DTP classes (speaking of types of software)
07 I would like to have more outside formal training but it is cost prohibitive.
09 Certain instructor at LTCC does not impart information well- not in a structured manner- assumes certain base knowledge perhaps, therefore intimidates some students--> computer aversion
10 Companies that provide training just rip off your money.
10 Outside courses are too expensive.
10 Speed of typing
12 I would like more short term (2-4 wks) evening or weekend courses, especially in spreadsheets.
12 Macintosh is easy.
19 Software manuals are poor training tools
19 Need to devote more quality time to training and learning how to better use our computer resources
19 Very satisfied with current training. Need to provide training or company specific applications. Need to teach employees to use more than 10% of applications ably and find information in manuals.
19 We need more access to micro computers; we have mainframes for the most part. We also need more training outside the organization.
19 This information is based on a commercial art program at a vocational education center.
19 I wish employees could motivate themselves to become really skilled with the software used at work
19 Whole industry lacks guidance
19 Cerritos College has been a big help with their computer classes.

19 None, other than having customized software lends itself to many "bugs" and is often very frustrating
19 Qwiz system testing is outstanding
19 I wish a trained teacher at work would teach us instead of another employee.
19 Changes are occurring so quickly it is difficult and expensive keep up.
19 Longer training periods with handouts to use as study guides.
19 Need more exposure to it.
19 Need training when company converts to Word Perfect.
19 ROP is the Best training I have had
19 Employees should have more formal training.
19 Some courses offered at P.C.C. are very good. There are a few I thought were to simple to be earning credits-more for on the job instructions.
19 Company have it's own training center
19 Additional formal training required and requested.
19 Need more mandatory computer classes as part of degree program
19 I don't believe my company's training is extensive enough. We could easily utilize several programs if given the chance.
19 More in depth training of uses for types of software, i.e. what can you do with a spreadsheet, word processing , database? Can they be integrated, formatted?
19 Non-business majors seem to have no exposure to computers.
19 We use Glendale C.C. for all our training.
19 If employees had more experience in the Basic applications (WP, Excel, Paradox) it would be helpful.
30 I cannot conceive of getting 1/2 of the work we get done on the Mac done on a Dyes machine. They can do the work, we can't deal with 20 different interfaces for each software.
30 Software applications should have "easy to learn" training manuals. They're too complex.
30 Need to take community college classes in Microsoft Works, Windows, WP51.
30 I wish I received the tutorials an manuals with my pirated software.
30 Operating differences between spreadsheet and word processing (i.e. Lotus vs. Works) causes most inefficiencies.
30 Not enough in depth training.
30 Some Comm. College instructor will not handle questions beyond their programmed schedule.
30 A computer operator with a speed and accuracy course is not comparable to a well-rounded business-travel person with computer skills.
31 Longer training
34 Prefer on-the-job training with Enable program
37 Need in-house training. Time off to attend classes.
37 My company should but doesn't support its clerical support staff.
37 Courses take a lot of time.
37 Not enough time for classes. 7 hours is not enough time to learn and use a program.
37 In-house training is only introductory in nature; feel more in-depth training should be offered on-site.
37 We are working on a program to train more employees in-house
37 Office automation varies greatly from department to department in most local governments. Public perception of excess expense keeps us from taking the initial step to becoming totally automated and integrated.
37 Current on-site training is excellent and very inexpensive.
37 Comprehensive training needed
37 I've tried several times to get into certain community college courses but they are always full with full time students by the time I apply.
37 Training could be improved. Equipment should be compatible throughout organization.
38 Very satisfied with current training
38 May become more of an issue in future as business grows.
41 I believe everyone should be familiar with it. For bookkeeping we will soon go to computers.

41 As a middle-aged person starting with no computer experience, I have found computer offerings and the several courses I have taken at the college of San Mateo to be entirely satisfactory. Stick with standard operating systems and applications.
42 Good documentation training/reference manuals and vendor support--need to be improved
42 The Santa Barbara Adult Education program is excellent. Employees like it because its cheap, fast, and self-paced, and no tests.
42 It is needed at a local level besides software 800 numbers.
42 As a husband and wife company, he does the labor and writes the bills and bids, etc.. We're looking into getting a financial program.
43 The county provides training through city college and at Data Processing but the classes have a year long waiting list.
43 No- however my answers only apply to my workstation as a variety of PC's and software are used throughout the company.
43 Many employees learn specific programs, but lack understanding of basic computer concepts.
43 No unified set of instructions.
47 User support form S/W and H/W manufactures/suppliers.
47 Our out lying area is over 200 miles from our main training facility.
48 Unrealistic time considerations
48 Diversity
48 Does not teach importance of standards (every micro user is an expert)
48 More two-day workshops essential.
48 Could use more
48 Our company provides general opportunities for training to its employees.
48 More management training usually needed. Managers need to know what is in it for them.
49 Just that it is not provided and should be.
56 Need more people that can use Word

"Other" response by County Code to Question 102: What courses would your company like to see your local community college offer in the future?

01 More dbase IV classes
01 Introduction to Fortran, C and T, LFSP.
03 Computer, business management. As many as possible in all areas. We need extended campus versatility.
07 More Word Perfect and Lotus 1,2,3. The available classes are hard to get into and lack sufficient depth.
07 Word for Windows (PC)
07 Word Perfect 5.1 for DOS, Lotus 1,2,3, Windows
07 Basic computer training for business- for older, computer-illiterates.
09 2-hour sessions for beginning, intermediate and advanced users.
09 -PC's : setup and trouble-shooting
-LAN
-Logic
10 People that know how to teach basic computer skills and knowledge.
10 Quattro Pro
Basic Desktop Publishing
12 In-house training for groups of 10-15 on Windows, Excel and Word Perfect.
12 Since I own a very small business, most of the training I need is for myself. I'd like to see something for business owners, that practical i.e. not how to start a business but how to manage small business on computers.
12 Word Perfect 5.1, Quattro, Fox Pro
12 Classes on UNIX
12 Business software review classes to help small businesses find and make informed decisions about what software is best for their individual needs.
12 Computer accounting

12 Mac with integrated programs.
12 We use corporate in-house programming on-line with statewide network.
12 Autocad-etc.
12 UNIX
19 How to use software
19 Thorough understanding of most used DOS commands
19 Basics, setting up. Standard software applications
19 1) Provide in-house classes on programs that we don teach. (databases)
2) Provide networking classes (on Novell Netware, LAN Manager, TCP/IP)- entry level and troubleshooting/ network management.
3) Provide Windows training
4) Provide applications analysis training.
5) Provide meeting management class (How to run effective meetings)
6) Provide project management class.
19 Basic computer courses
19 More Desktop publishing
19 Overview class of new, popular software to give a familiarity of currently used programs.
19 More practical business applications, design and use such as: forecasting, personnel management, sales contacts. Current teachings are too theoretical
19 A good basic course on DOS and how computers work.
19 Usually too general
19 Open Autocad with the flexibility to teach general or specific needs rather than prerequisite classes that are not used by various trades.
19 Basic DOS
Word Perfect`
19 Printing industry-related
19 More computer classes and more updated equipment.
19 More PC Application for office automation training
19 Tax prep software- I have good teacher candidate
Word processing
19 Basic communication skills (phone etc..)
19 1 or 2 week special applications courses.
19 off-site computer classes maybe at Sienna Education Center?
19 Mac. training
Graphic-page layout
19 Federal and state legal basics for small business owners. (explanation of forms, taxes, payroll etc.)
19 Shorthand
19 Values and work ethic should be included in all courses. Hard work overcomes any technical deficiencies
19 The latest WordPerfect 5.1 and 6, Lotus 1,2,3, Dyes, Database, Publishing software.
19 More intro courses to computers.
19 Word processing, English grammar
19 More computer courses
19 Computer programming courses to professions like a System's Analyst.
19 More CIS classes.
19 computer courses at reasonable cost.
19 Desktop Publishing, Lotus 1-2-3, dbase, graphics.
19 LAN, Advanced hard drive instructions, DOS 5.0, FoxBase- dbase programming
19 Training in software programs
19 Use of modems through a network or E mail
19 More classes on records management- fast growing field.
19 Adequate number of classes available
19 Lotus 1,2,3.
19 Health unit coordinator in medical setting.

19 Software specific training that would be of a lower cost than offered by private companies.
19 Courses geared toward earning state certification in various trades example: landscape contractors, plumbers, etc...
19 Major software in Electronic SP. and Database management and Desktop Publishing.
19 Problem solving using a personal computer
19 Office software not just Lotus.
19 Computer application
19 Desktop publishing
Ad preparation (Mechanical)
19 already offering great, wonderful courses.
19 Simple Dos
Simple Spreadsheet
19 How to maintain your computer- common problems.
19 Aldus PageMaker-PC
Corel Draw-PC
19 Paradox and Windows application development.
19 CAD using CadVance software
19 How to improve productivity using the PC. Showing user how to think of ways to use PC more effectively
19 How the Macintosh system 6.0 works.
19 RPG II or RPG 400. Good data structures course and pseudo code logic training.
19 Software usage, i.e. Word, Excel, PageMaker
21 Basic computer skills
21 Database
27 Windows programming, PC configurations and maintenance of 80X86's. PC Montanans people are really in need
27 Better electrical classes,
30 Guest lectures for: solo company, small, medium and large corporations. Today's marketing courses are dated and to bring students into the 2000's you need decision maker who has the responsibility for running the organization.
30 More macintosh oriented classes.
30 Microsoft Word, Microsoft Excel, Mac PageMaker.
30 Autocad
30 Better schedules for people that work.
30 A course on software familiarization. There are so many packages on the market, it would be nice to get an idea of what the top selling packages are in each category (i.e. accounting, graphics, WP, etc..)
30 Medical filing system.
30 Comparative Seminar on Spreadsheet Software and Database Software.
30 Have business concepts requirement before training on computer. Telephone skills, critical thinking skill, good foundation in word processing skills- skills are transferable.
31 Most are offered already
31 Small business accounting, single entry.
33 More Basic skill learning classes.
33 Cad, Network
33 Hotel Management and leisure industry development.
34 A greater understanding of programming/ versus how to use a particular software.
34 Main-frame system management
Main-frame operating systems (UNIX)
34 Micro station (CAD), Basic "C" language, visual basic.
34 UNIX, OS/2
34 Basic computer applications
34 Community college (ARC) advertise Enable class but taught something else instead.
34 Q & A

34 Computer operation systems.
Software applications.
34 Q & A, LAN-network, UNIX
34 UNIX
OSF motif, etc..
35 1-day courses on Lotus, WordPerfect, Windows, etc..
36 After business hours classes for not more than 1 day per week on WP/DB and spreadsheet and desktop software programs
36 Teach potential computer oriented employees not to be intimidated by computers.
37 Word Perfect 5.1
37 More current courses in state-of-the-art tools
37 Ventura Publisher, Harvard Graphics, Windows
37 UNIX courses
37 graphics
37 WP for windows.
37 Questions 92, 93, 94, 96 are difficult to answer because we are a computer company and all employees are using and familiar with computers

37 Intro to word perfect
Lotus 1 2 3
37 Spelling, grammar, basic math
37 Does not apply with our company
37 Enable
37 Both formally taught classes on popular applications programs as well as self paced classes for good hands-on practice.
37 More Mac classes geared specifically for the business user.
37 Desktop Publishing
Mas 90
37 Quick-learn basic courses
37 Intergraph's DP Layout
37 Our employees could benefit from on-site in-depth training by community college instructor.
37 WordPerfect
Lotus 1-2-3
37 Paradox classes weren't noticed
37 MS Word for Mac and PC. Windows- Basic and Mac version. Windows for Word Perfect.
37 Micro computer applications: word processing, spreadsheets and database intro. English/grammar to support the above. Basic Math and interpersonal skills (Business Comm.).
37 Word Perfect
37 Understanding computers
37 All graphic courses by Macintosh
37 More business related classes.
37 Dyes basics, WP51 Windows, Printer knowledge and uses. Modem- what it is and how to apply to your business.
37 Computer repair
37 More combination courses such as WordPerfect, Lotus 1-2-3 and DBase together.
37 Dos programing and quality management techniques for computer training for students.
38 Give a very good basic hands-on-training for DOS commands. It helps make a person more comfortable and in control of the PC.
38 Training in all word processing, graphics and DTP programs.
38 Integration of publishing using scanners to create brochures. Financial package monitoring costs, revenues, generates form letter and stores databases.
38 Computer literacy for the work place: Word processing, Spreadsheets, database, accounting in general.
39 More Desktop Publishing.

40 Word processing, Word Perfect, 10-key, copy machine training.
40 Keyboarding, 10-key skills.
40 Courses which correspond to the types of software business are using today.
41 Business concepts, small business management, business math.
41 A short course on hardware-- how to maintain the machines, how to remove or add drives, boards, etc.; features (pros and cons) of different kinds of hardware for various uses. When standards settle down in a few years, a course on electronic photography and photo manipulation. Adobe Photoshop for the Mac may become the Mac standard.
42 OS/2. Unix and programming courses which would improve knowledge in this area without being a professional program.
42 Spreadsheet, desktop publishing, integrated
42 Quark Xpress, Excel, MS Word, Adobe Illustrator.
Macintosh; we are standardizing on the Mac and are not interested in more PC classes. Please get into Macintosh
42 Shorthand, Windows
42 Word Perfect. Also special outside consulting for after class situations.
42 Excel, File Maker Pro, applications survey course.
42 10-key
42 Small business computing.
42 Hands-on training courses and vocational experience.
43 Macintosh, Desktop Publishing
43 Macintosh
43 We only take software courses through the company or approved vendors- not through local colleges.
43 Solve above problem.
43 Inexpensive computer software training.
43 Would you make better hours for Shorthand. More evening classes.
43 Word processing, using and programming database, spreadsheet.
43 Intermediate use of developmental software, e.g. PageMaker, HyperCard.
43 Basics of PC's
43 Midlevel and above software training.
43 All Macintosh applications.
44 Cad Cam
47 Spreadsheet courses covering all of the popular programs (Excel).
47 What ever the choice, it must be current for the application/course: i.e. course: DOS 3.3 no Dyes 5.0 yes, etc.
47 Weekend crash courses in Word Perfect, Lotus and Harvard Graphics.
47 Project management
48 One or two programs on computer software updates
48 Satisfied with choices only problem is the classes are often full. Perhaps intense weekend classes will be of benefit
48 Novell, network using.
48 Project management
Network administration
48 UNIX
System administration
48 Client management
48 Systems management and design.
More telecomm.
48 Novell
48 CASE, Open systems, UNIX
48 Advanced "C" programming, C+ programming, Windows programming using Pascal or C.
48 Computer art classes (animation, etc.)
48 Working with Dos.

48 Lotus
49 Not used by company. Employees enroll in classes at their own cost and time.
49 Short word processing courses
49 Hands-on training
49 Lotus - Word Perfect
49 FileMaker Pro - Data Base management
52 Production type word processing.
52 Hands-on applications training
56 Word processing and spread sheets.
56 Hardware instruction.
56 Insurance ethics applied to licensing requirements.
56 Class for new version updates of software. (Excel, Autocad, Lotus, Word Processing, etc.)

"Other" response by County Code to Question 103: Any other comments?

07 Interested in results. Would like to see design and statistical analysis.
10 Due to the fly-by-nights in consulting and training I learned by myself and taught my own employees. I am very satisfied.
12 We just bought a new system, so we don't own or use much software other than what came with the machine. We are still exploring what software suits our business size and needs
12 Our use of computer (Mac) is limited to Microsoft Word, Quicken and a dental program called Dental Mac. Our employers are totally untrained in basic computer mechanics. We know nothing about using any part of the computer except our programs. We do not have the time in our practice to spend on training anything but these programs.
19 As the company bookkeeper who uses the computer the most I filled this out. I just wanted to say that the computer classes at mt. SAC Community College allowed me to easily pick up how to use microcomputers after I started working. However, I feel anyone who has had no computer classes would have a hard time learning on the job how to run a microcomputer.
19 It would have been useful to identify in this survey the systems and software that are standardized or most prominently used at the surveyed companies. This survey addresses the variety of systems and software but not the extent to which they are installed/used. As PC DOS users convert to graphical user interfaces there is a great debate about whether they should use Windows or Macintoshes.
19 We are classroom situation hands-on training
19 Schools should concentrate only on teaching manual skill of typing (using the keyboard). employees will teach use of their computers on the job.
19 Great idea! Teach human relations factors of working in an office. Stress how important dress is to an employer seeking people to represent their company. Teach them to accept criticism as a tool and not take it as a personality flaw. More teachers!- less administrative salaries
19 This form is not user friendly
19 Computer classes should be mandatory in high school as they are going to be used in every day work situations
19 This class is helping me to set up a billing system for my mobile park
19 Different departments use different computer systems. For example, word processing and support groups mainly work on IBM or IBM compatibles and work mostly with word processing programs. Our finance programs dept. utilizes different spreadsheet and accounting programs. My dept. (claims technical) works on a network that likes all offices across the country. Basic computer training is helpful in all areas however, depending on the career an individual chooses, training should be concentrated in that area.
19 I love my WordStar and find Microsoft very tedious and not as easy.
19 Very interested in seeing results of this survey an recommendations that result from it.
19 I don't know the difference between a microcomputer and just a regular computer, so these responses are for what we sue in the way of Macintosh and Austin Dos computers.
30 I have a hard time referring trainees to community college classes for a semester class to learn the equivalent of one day at a commercial training center.

34 Offer shorter classes for basic programs 1-2 weeks, 2-4 sessions.

37 We are a 28 person architectural firm. Computers are also used heavily in our design/construction documents.

37 I personally prefer training on site. I don't have time to go to School in the afternoon. I like it better because the classes are small, hands-on, and personal.

37 Time to learn software is not available at my desk where I must spend time doing my job. If I could spend about 2 hrs.. a week at an on-site in-depth class, I feel I would be able to make better use of my equipment.

38 In training non-PC person, it's better to let them work on the PC during instruction instead of just lecturing about what to do. Get the person's hand dirty on the PC. Make lab or lesson meet a certain goal- produce a graph, a small newsletter. In this way it forces the user to use and become familiar with a software package. Telling them or demonstrating usually will be forgotten by the time the next class meets.

38 The bulk of our data processing is done using the NCR Tow or a UNIX based mini computer

47 I am a pilot and I use computers primarily for obtaining weather data. At most major airlines, the cockpits of the new generation aircraft are computerized with CRT displays and flight management systems with printout capability. At my level, computers are used to determine route structure.

48 Solano College- offer 2 day courses i.e. Word Perfect

56 This is not a good questionnaire for our business. We are a pharmacy using pharmacy programs if an employee can keyboard and read they can operate our systems. All these other programs are not of use to us. I have all this knowledge of programs and nowhere to use it. From my retail business I just need basic knowledge. I will teach the rest. I have more problems with employees who cant read or do arithmetic.

Dear Business Person:

Business educators are responsible for teaching skills for future employment. We continually develop new programs and update existing programs to teach these skills. We have designed this survey to give you — members of the business community — a way to let us know what skills you want in your future employees.

This state-wide survey is sponsored and funded through the Chancellor's Office for California Community Colleges. Thank you for completing and returning this survey at your earliest convenience. The data will be compiled during the summer of 1992. If you would be interested in the final report which will be distributed to business educators, please include a self-addressed and stamped envelope.

Carole Jarrett
Project Director

Solano Community College

1992 Office Automation Survey for Business and Industry

_____ Enter your 5-digit ZIP CODE.

_____ Enter the name of your COUNTY.

Yes No
a b 1. Does your company use micro computers?

If "No," please skip to Question 99.

FOR QUESTIONS 2 THROUGH 91, PLEASE CIRCLE ONE RESPONSE.

a Presently use
b Plan to purchase within one year
c Have no plans to purchase
d Don't know

MICROCOMPUTERS:

a b c d 2. IBM or IBM-compatible
a b c d 3. Macintosh
a b c d 4. Combination of #2 and #3
a b c d 5. Other: _____

a Presently use
b Plan to purchase within one year
c Have no plans to purchase
d Don't know

PRINTERS:

a b c d 6. Letter quality
a b c d 7. Dot matrix
a b c d 8. Laser
a b c d 9. Color
a b c d 10. Plotter
a b c d 11. Other: _____

NETWORKS:

a b c d 12. Local Area Network (LAN)
a b c d 13. Wide Area Network (WAN)

PERIPHERAL DEVICES:

a b c d 14. Modem
a b c d 15. CD-ROM drive
a b c d 16. External hard disk
a b c d 17. Removable hard disk
a b c d 18. Fax
a b c d 19. Tape backup unit

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a Presently use
b Plan to purchase within one year
c Have no plans to purchase
d Don't know

PERIPHERAL DEVICES (continued)

a b c d 20. Mouse
a b c d 21. Track ball
a b c d 22. Light pen
a b c d 23. Table-top scanner
a b c d 24. Hand-held scanner
a b c d 25. Other: _____

OPERATING SYSTEMS AND ENVIRONMENTS:

a b c d 26. MS-DOS or PC-DOS Ver. 3.x
a b c d 27. MS-DOS or PC-DOS Ver. 4.x
a b c d 28. MS-DOS or PC-DOS Ver. 5
a b c d 29. Windows
a b c d 30. OS/2
a b c d 31. UNIX, XENIX, AIX, or A/UX
a b c d 32. Macintosh System 6 or less
a b c d 33. Macintosh System 7
a b c d 34. Other: _____

WORD PROCESSING PROGRAMS:

a b c d 35. WordPerfect for DOS-based machines
a b c d 36. WordStar for DOS-machines
a b c d 37. DisplayWrite for DOS-machines
a b c d 38. Microsoft Word for DOS-machines
a b c d 39. Works for DOS-based machines
a b c d 40. WordPerfect for Macintosh
a b c d 41. Microsoft Word for Macintosh
a b c d 42. MacWrite for Macintosh
a b c d 43. Works for Macintosh
a b c d 44. Other: _____

SPREADSHEET SOFTWARE:

a b c d 45. Lotus 1-2-3, Version 2+
a b c d 46. Lotus 1-2-3, Version 3+
a b c d 47. Quattro Pro
a b c d 48. Excel for Macintosh
a b c d 49. Excel for DOS-machines
a b c d 50. WingZ
a b c d 51. Other: _____

DATA BASE SOFTWARE:

a b c d 52. dBASE III Plus
a b c d 53. dBASE IV

a Presently use
b Plan to purchase within one year
c Have no plans to purchase
d Don't know

a b c d 54. Paradox
a b c d 55. Oracle
a b c d 56. FoxBase
a b c d 57. Other: _____

FILE MANAGEMENT SOFTWARE:

a b c d 58. Works for Macintosh
a b c d 59. Works for DOS-machines
a b c d 60. FileMaker
a b c d 61. PFS: File
a b c d 62. Other: _____

GRAPHICS SOFTWARE:

a b c d 63. Harvard Graphics
a b c d 64. DrawPerfect
a b c d 65. Freelance
a b c d 66. MacPaint
a b c d 67. MacDraw
a b c d 68. SuperPaint
a b c d 69. Adobe Illustrator
a b c d 70. PixelPaint
a b c d 71. Adobe Freehand
a b c d 72. Corel Draw
a b c d 73. Arts & Letters
a b c d 74. Microsoft Paint
a b c d 75. Other: _____

DESKTOP PUBLISHING PROGRAMS:

a b c d 76. PageMaker for Macintosh
a b c d 77. PageMaker for DOS-machines
a b c d 78. WordPerfect Publishing
a b c d 79. Ventura Publisher for Macintosh
a b c d 80. Ventura Publisher for DOS
a b c d 81. Quark XPress
a b c d 82. Page Perfect
a b c d 83. PFS: First Publisher
a b c d 84. Other: _____

INTEGRATED SOFTWARE:

a b c d 85. Works for Macintosh
a b c d 86. Works for DOS-machines
a b c d 87. PFS: First Choice
a b c d 88. Symphony
a b c d 89. Wang Office
a b c d 90. WordPerfect Office
a b c d 91. Other: _____

PLEASE SELECT THE BEST RESPONSE TO THE FOLLOWING QUESTIONS.

92. Which of the following does your company feel is an obstacle to microcomputer productivity? (Check all that apply.)
    a. Inadequate training
    b. Difficulty learning new software
    c. Turnover of personnel
    d. Poor technical support or vendor changes
    e. Other: _____

93. How does your company evaluate a potential employee's microcomputer skills? (Check all that apply.)
    a. Reference checks
    b. Interview
    c. Test of skill
    d. Do not evaluate
    e. Other: _____

94. Which of the following does your company use to train employees for microcomputer applications? (Check all that apply.)
    a. On-the-job training
    b. In-house formal classes
    c. Outside formal training (private company)
    d. Self-teaching methods
    e. Contract training
    f. (95a) Community college classes
    g. (95b) Vendor-supplied training
    h. (95c) Independent training consultants
    i. (95d) Don't train
    j. (95e) Other: _____

96. If your company trains employees for microcomputer applications, rate your satisfaction with the current method(s) of training.
    a. Very satisfied
    b. Somewhat satisfied
    c. Neutral
    d. Somewhat dissatisfied
    e. Very dissatisfied

97. How is most of your company's "heavy typing" done?
    a. Typewriter
    b. Computer
    c. Other:

98. How many employees are in your company?
    a. Self only
    b. 2 to 10
    c. 11 to 100
    d. 101 to 500
    e. Over 500

99. Employment Development Department classifies all business and industries into the following jobs-by-industry code. What type of industry or business is your firm? (Please force yourself into <u>one choice only</u>.)
    a. Agriculture
    b. Mining or construction
    c. Manufacturing
    d. Transportation or publicutilities
    e. Wholesale trade
    f. (100a) Retail trade
    g. (100b) Finance, insurance, or real estate
    h. (100c) Services
    i. (100d) Government

101. Do you have any further comments on your satisfaction or dissatisfaction with current employee training for microcomputer applications?

102. What courses would your company like to see your local community college offer in the future?

103. Any other comments?

THANK YOU FOR YOUR TIME!

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Chart 1

Question 1: Does your company use micro computers?
Responses are provided in actual numbers as to state and section totals. Of the state-wide results 88% of the respondents used micro computers. The highest percentage was Los Angeles having 96% computer users, and the lowest percentage was Southern section having 70% computer users.

State	692	out of	790	or 88%
Bay	146	out of	157	or 92%
Northern	99	out of	108	or 91%
Central	12	out of	14	or 85%
Southern	141	out of	201	or 70%
Los Angeles	188	out of	194	or 96%
San Diego	87	out of	94	or 92%

Chart 2

Responses of Computer Users
Office Automation Survey

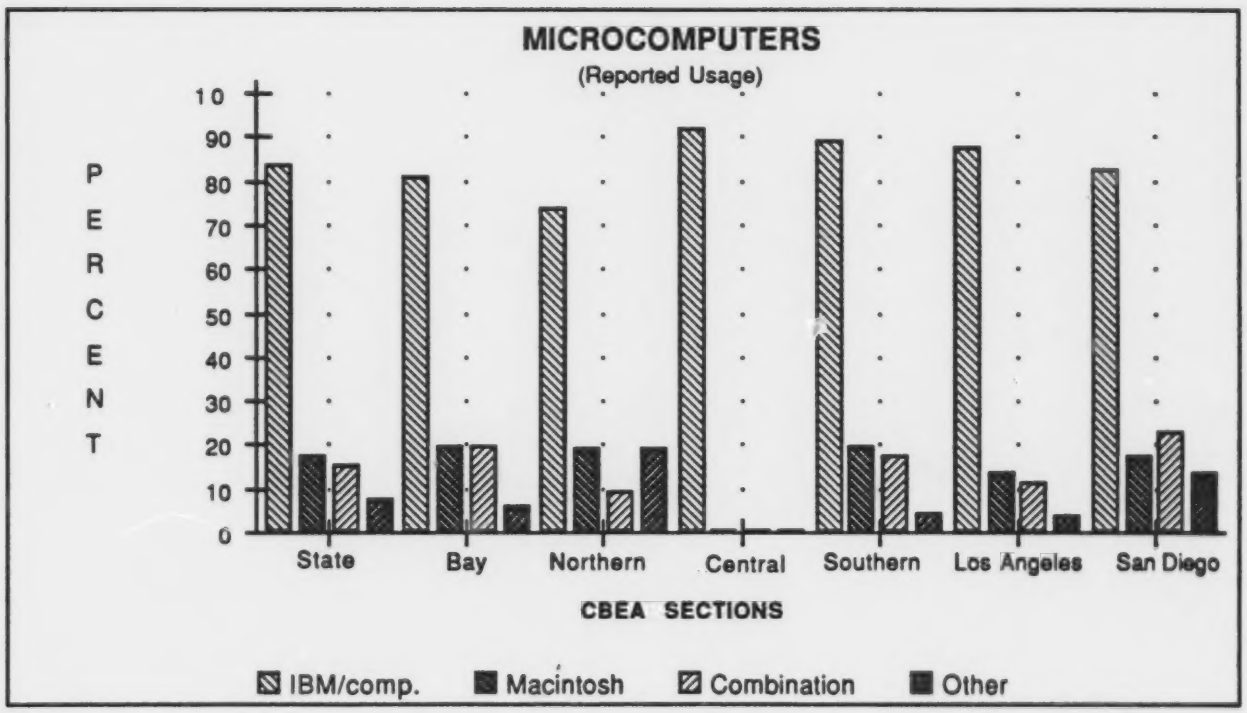


Chart based on responses from computer users: State = 692; Bay = 146; Northern = 99; Central = 12; Southern = 141; Los Angeles = 188; San Diego = 87; Unknown = 19.
Total responses: State = 790; Bay = 157; Northern = 108; Central = 14; Southern = 201; Los Angeles = 194; San Diego = 94; Unknown = 21.

Chart 3

Responses of Computer Users
Office Automation Survey

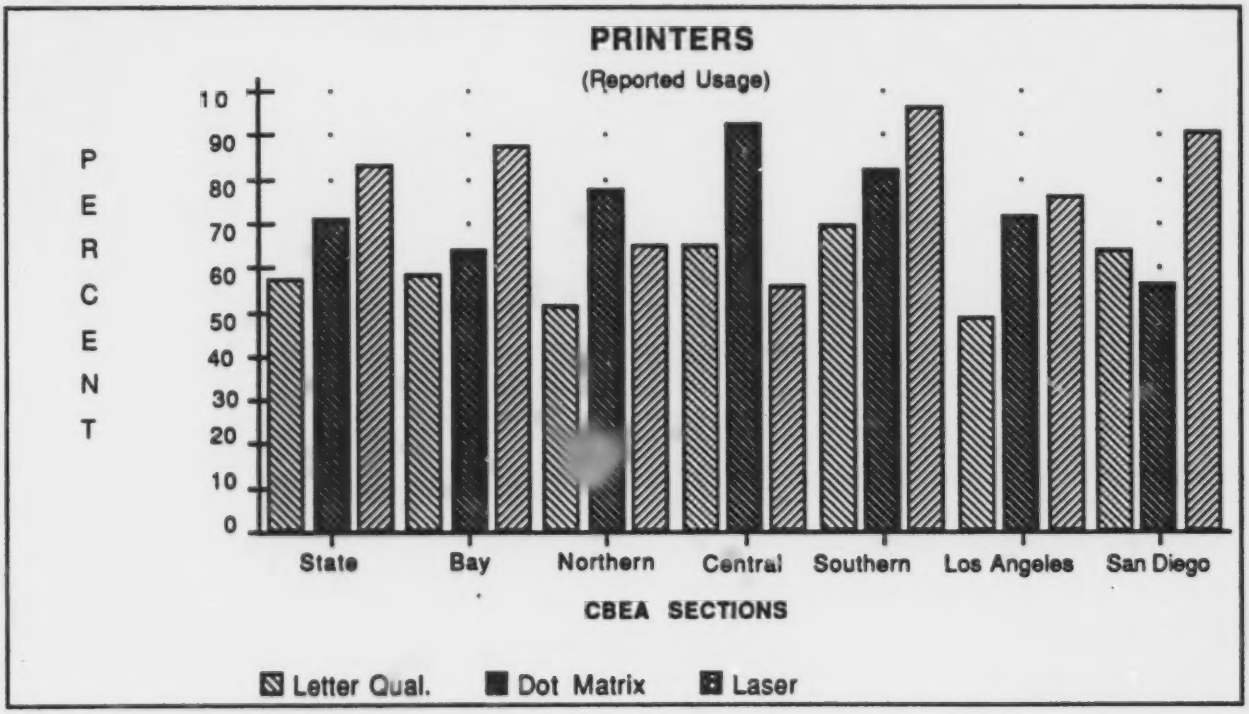


Chart 4

Responses of Computer Users

Office Automation Survey

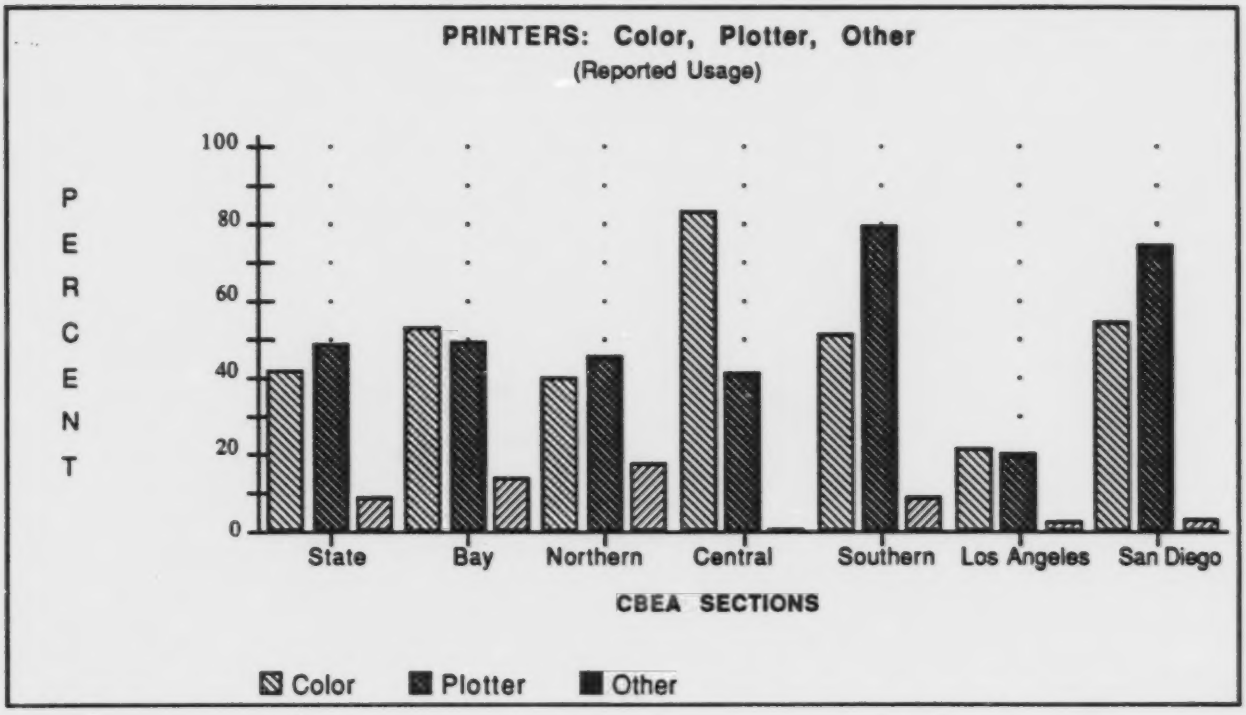


Chart 5

Responses of Computer Users
Office Automation Survey

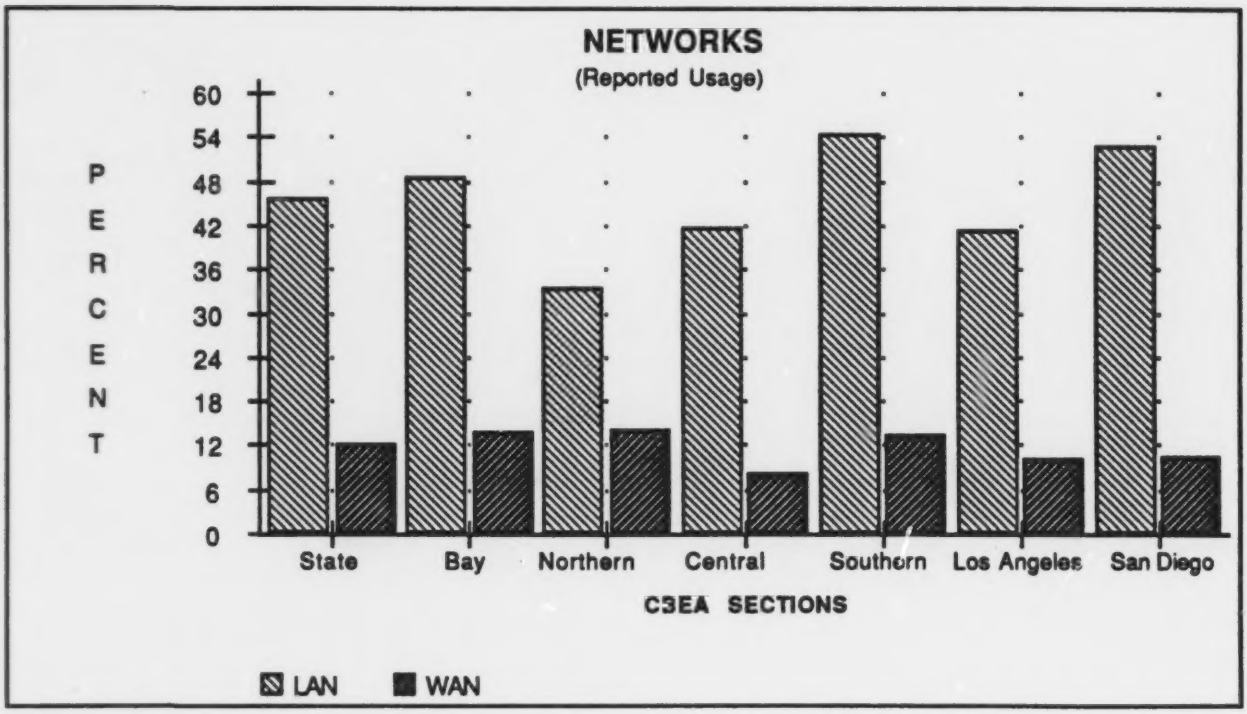


Chart 6

Responses of Computer Users
Office Automation Survey

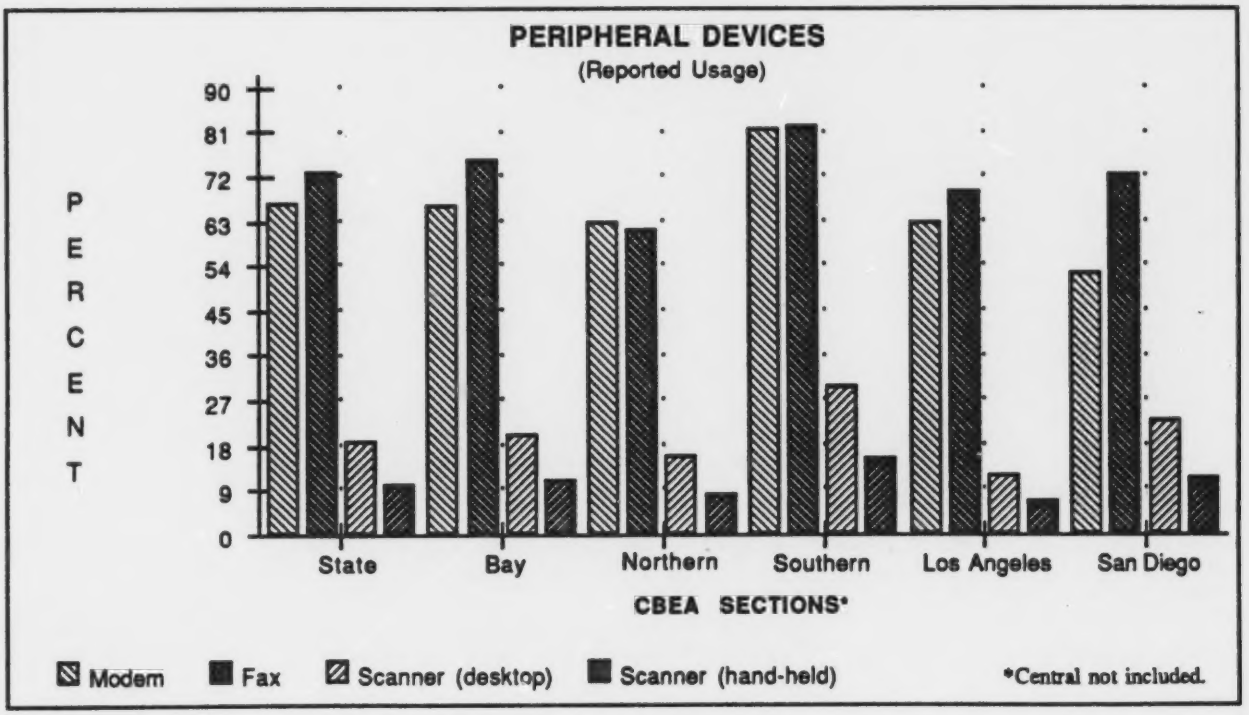


Chart 7

Responses of Computer Users
Office Automation Survey

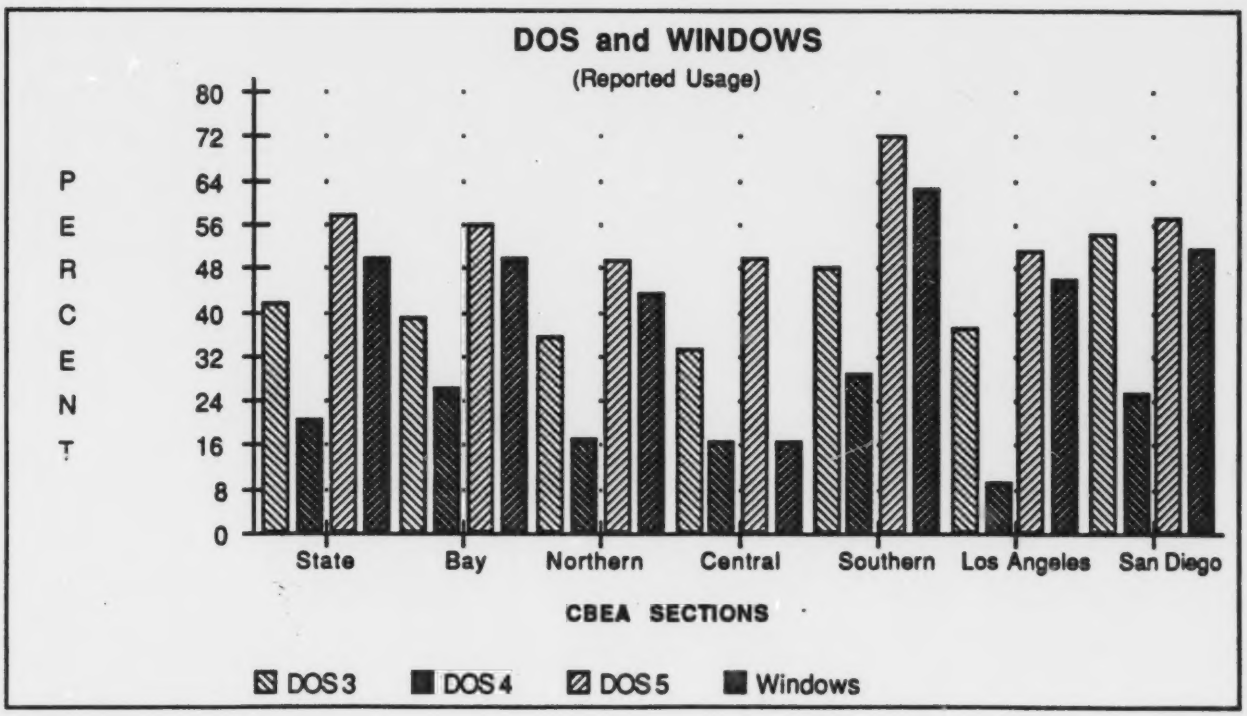


Chart 8

Responses of Computer Users
Office Automation Survey

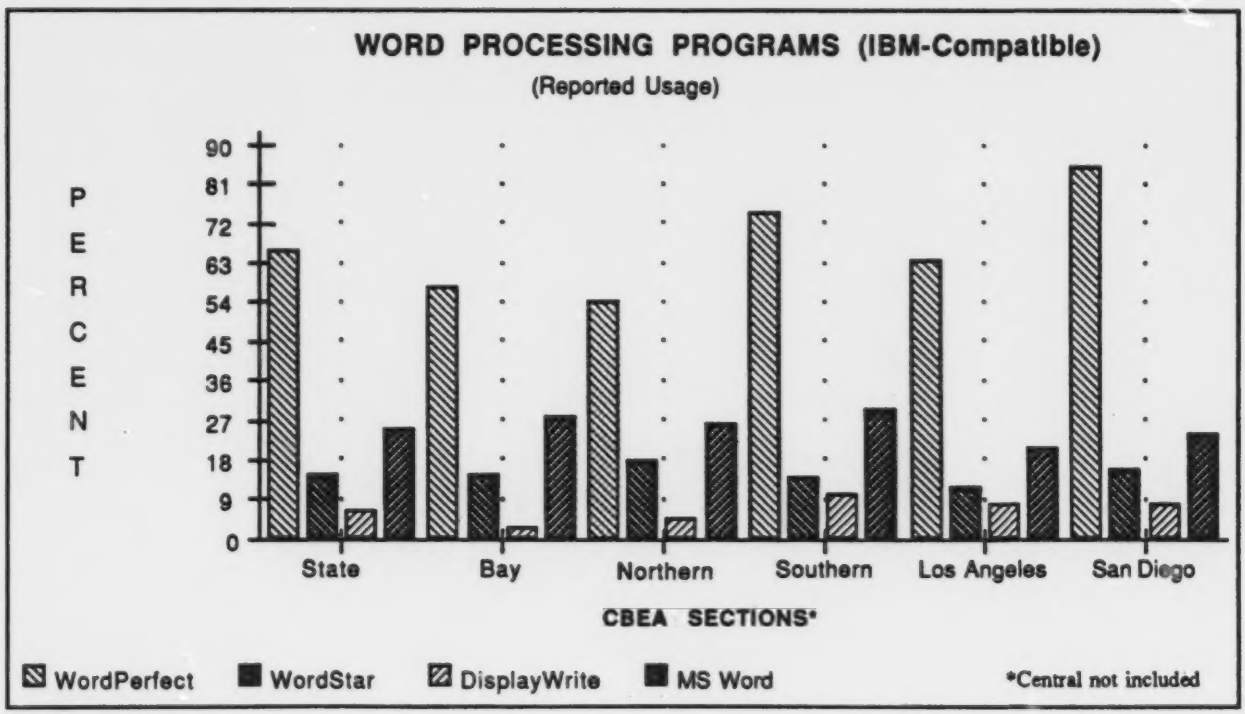


Chart 9

Responses of Computer Users
Office Automation Survey

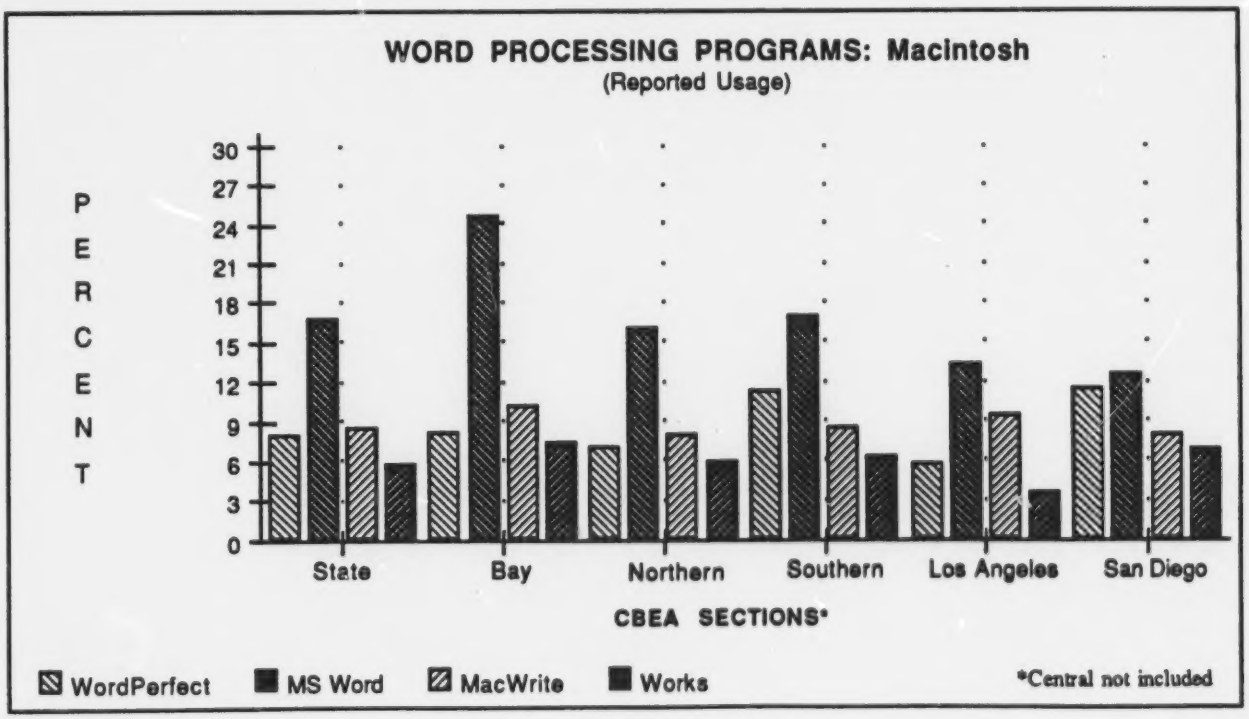


Chart 10

Responses of Computer Users
Office Automation Survey

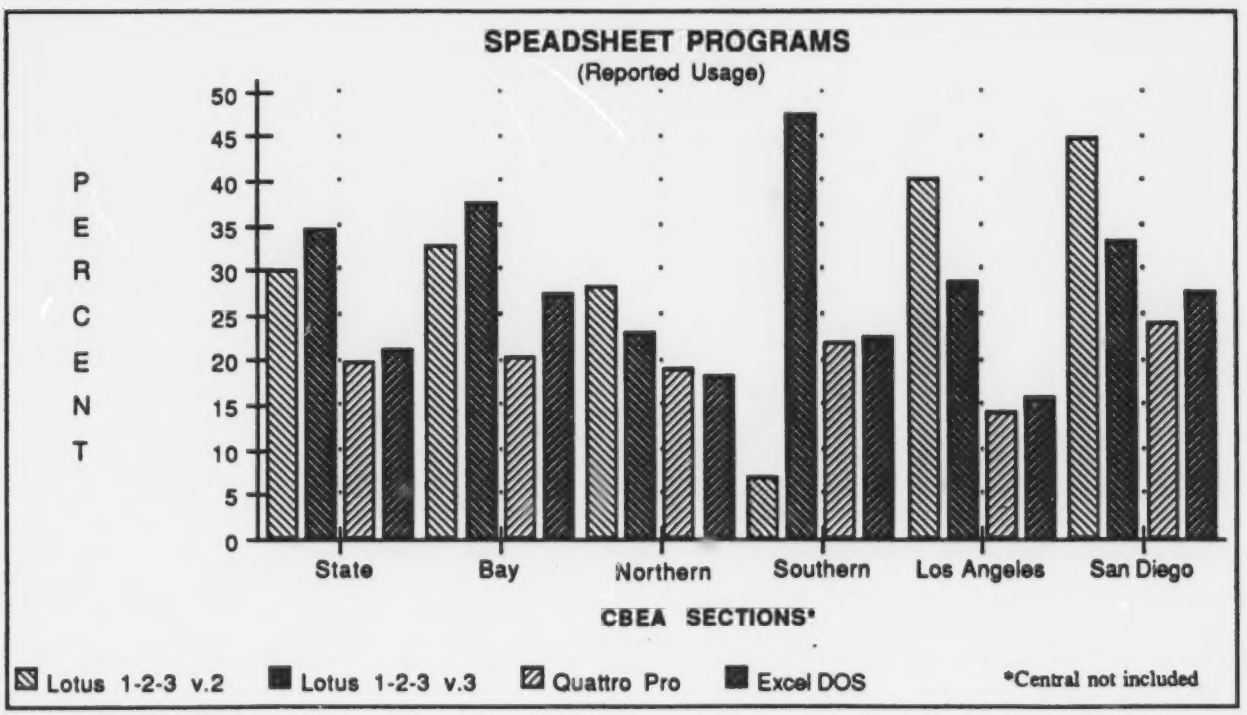


Chart 11

Responses of Computer Users
Office Automation Survey

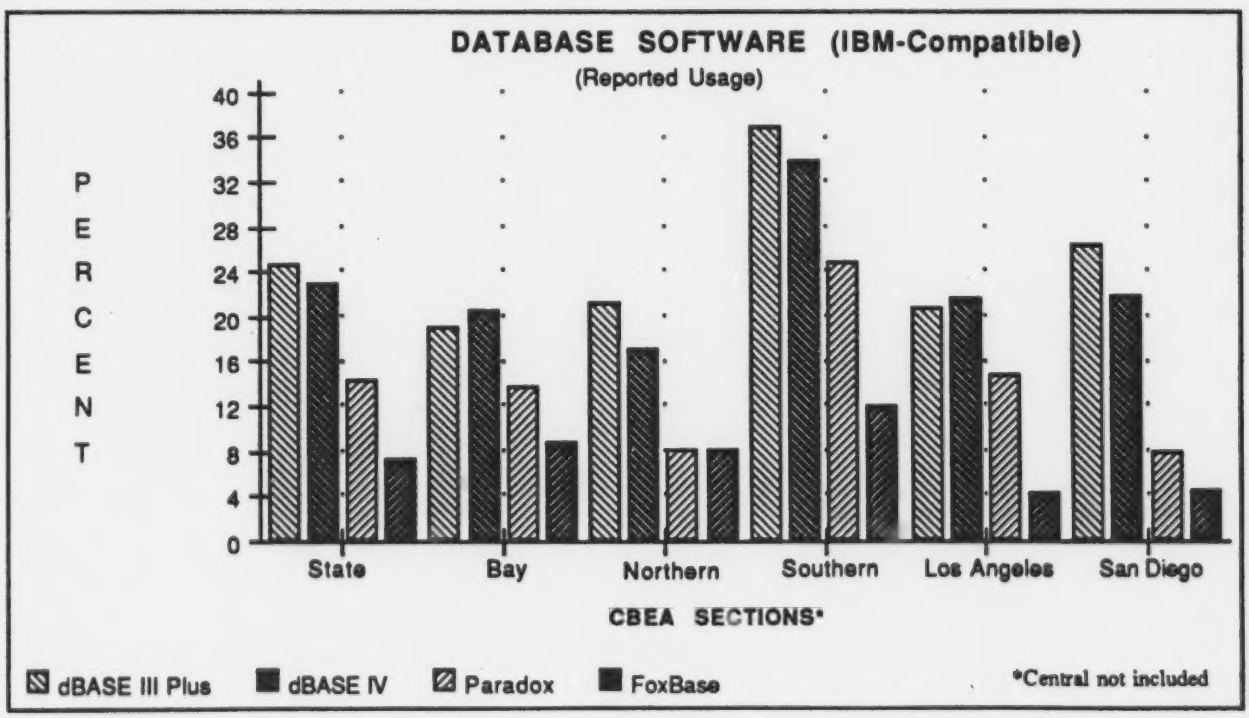


Chart 12

Responses of Computer Users
Office Automation Survey

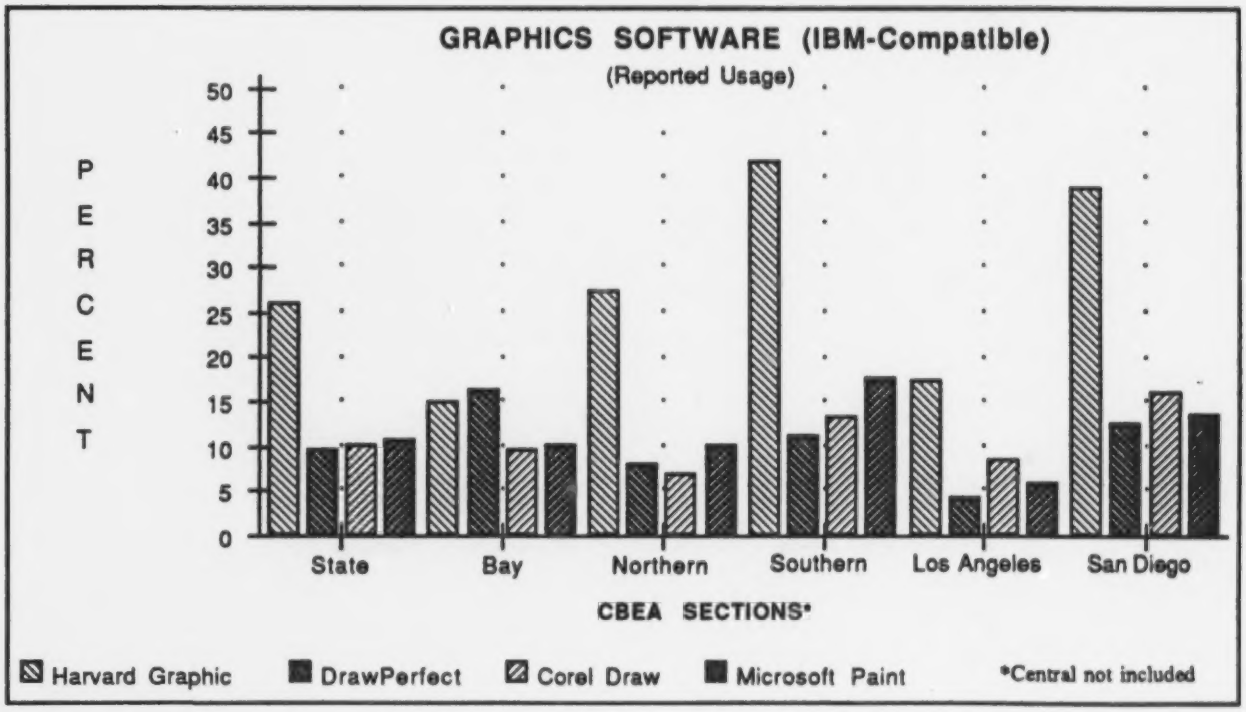


Chart 13

Responses of Computer Users
Office Automation Survey

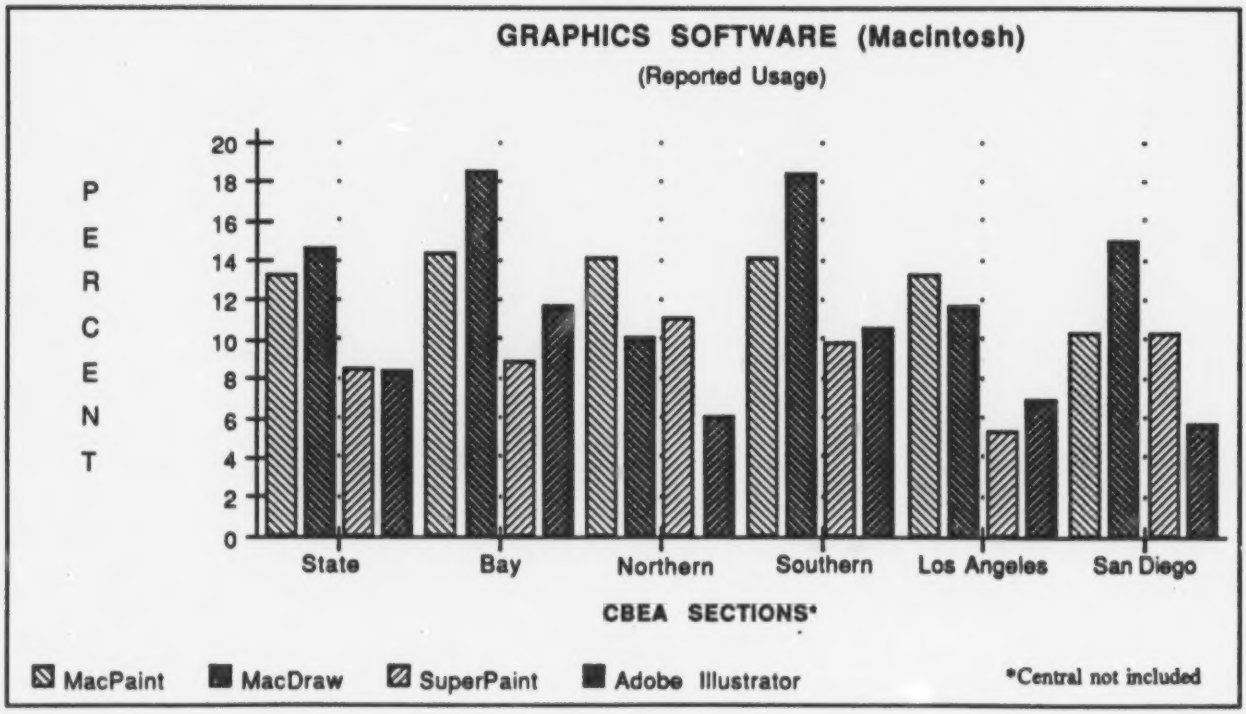


Chart 14

Responses of Computer Users
Office Automation Survey

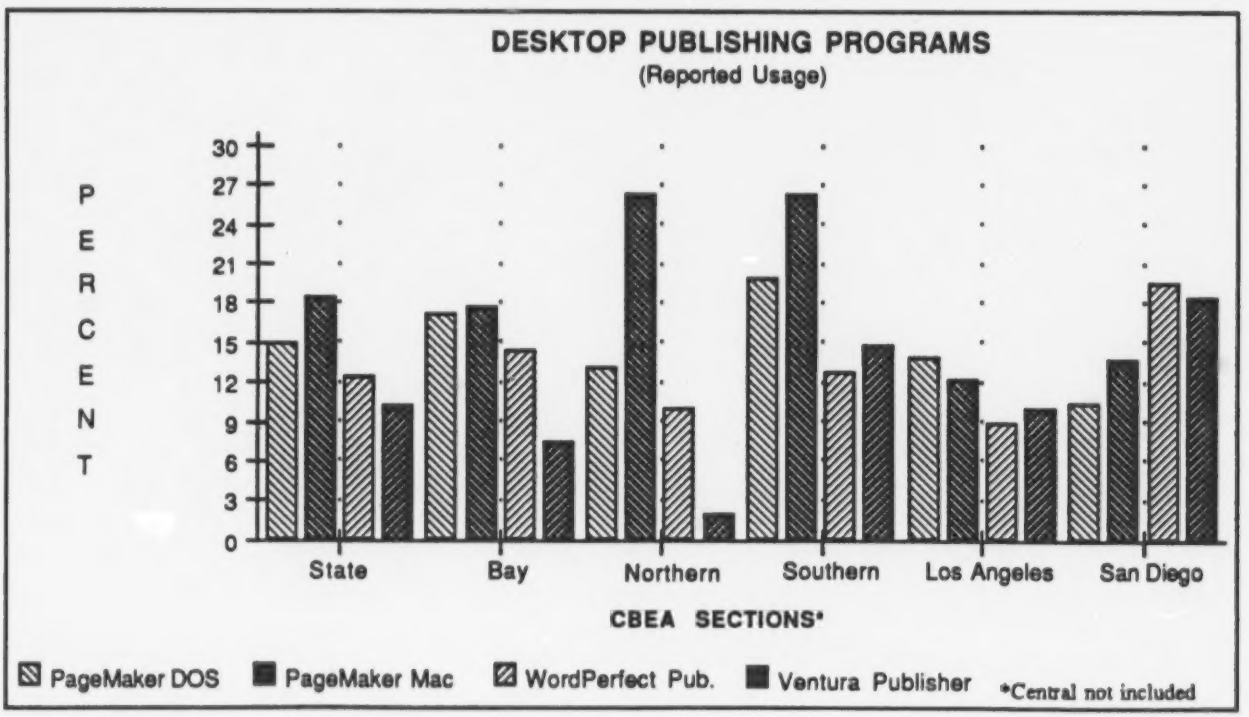


Chart 15

Responses of Computer Users
Office Automation Survey

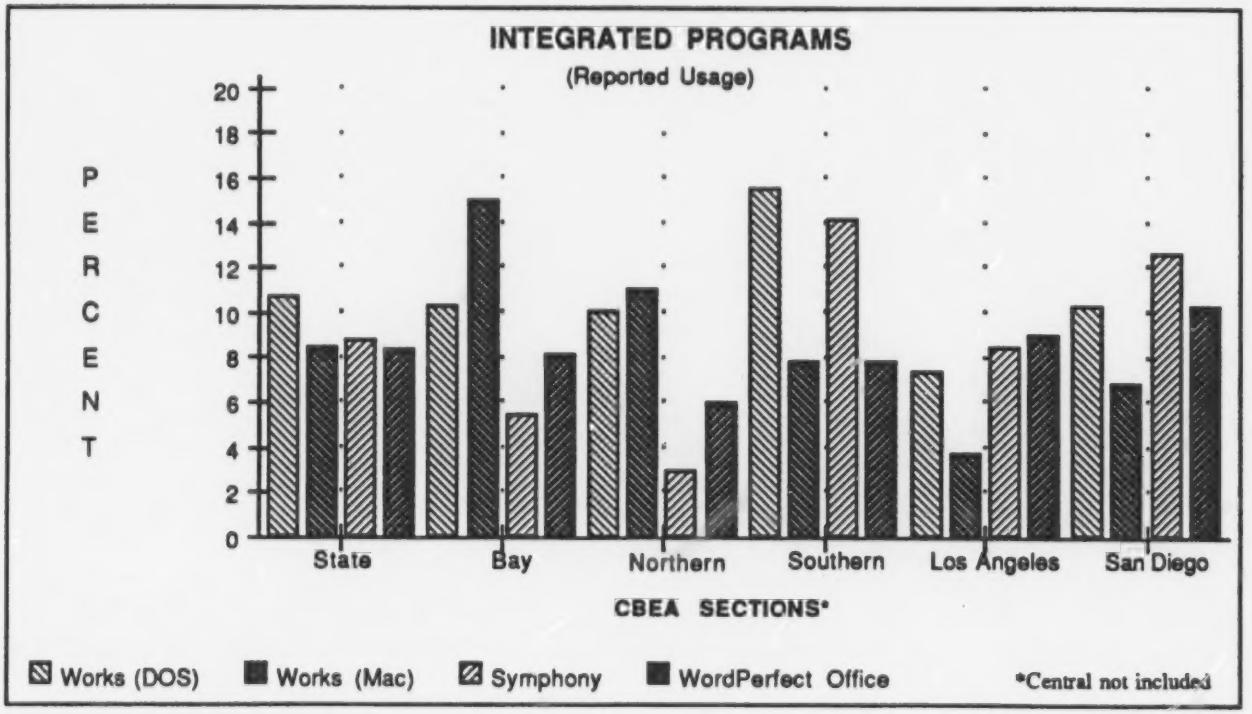


Chart 16

OBSTACLES TO COMPUTER PRODUCTIVITY
(State)

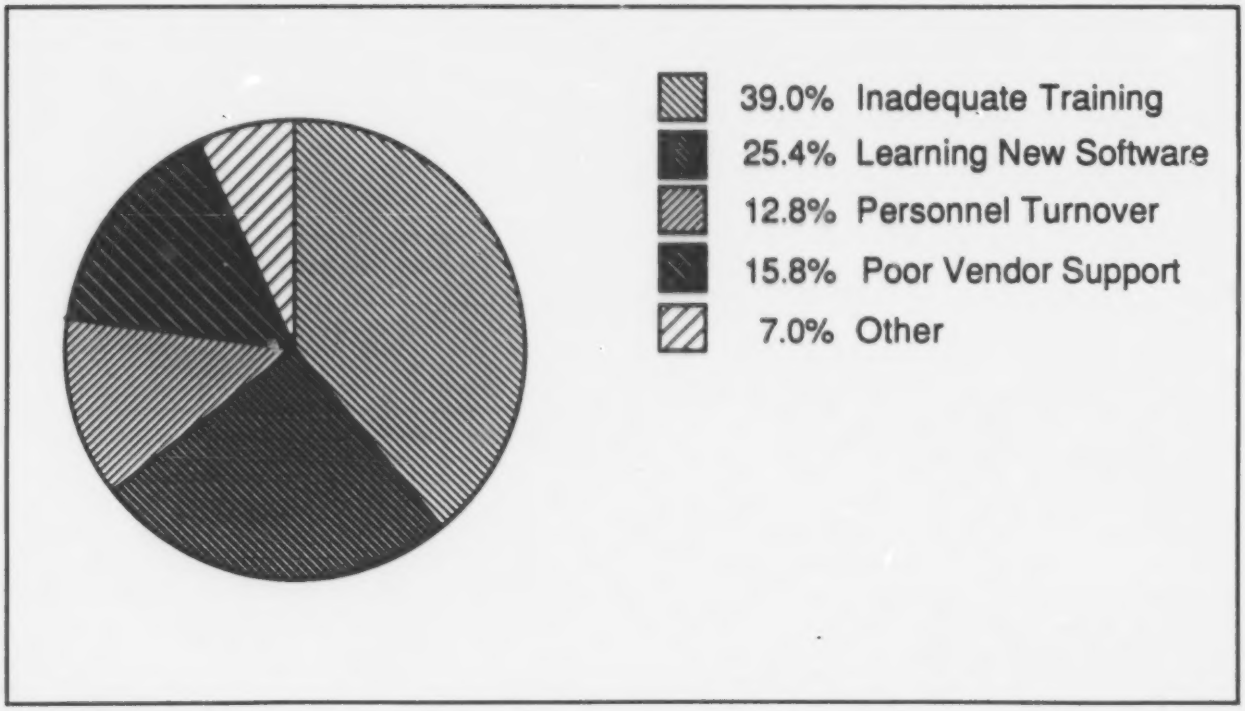


Chart 17

METHODS USED TO EVALUATE COMPUTER SKILLS

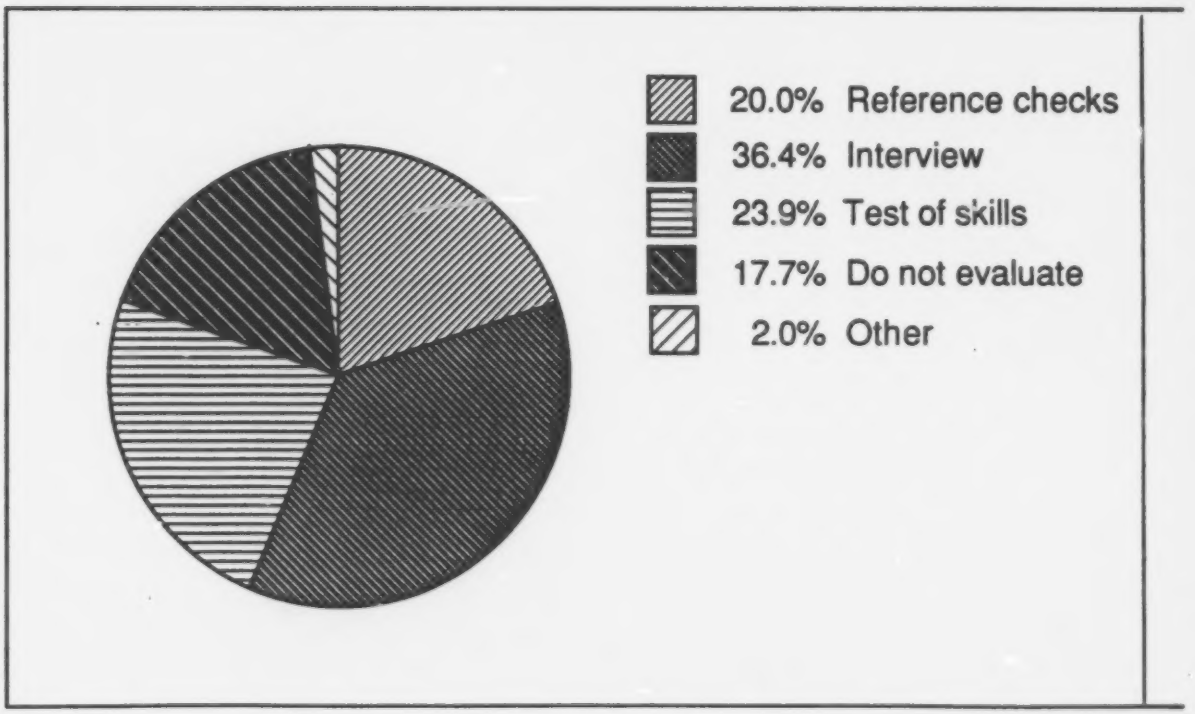


Chart 18

COMPUTER TRAINING METHODS USED BY RESPONDENTS

(State)

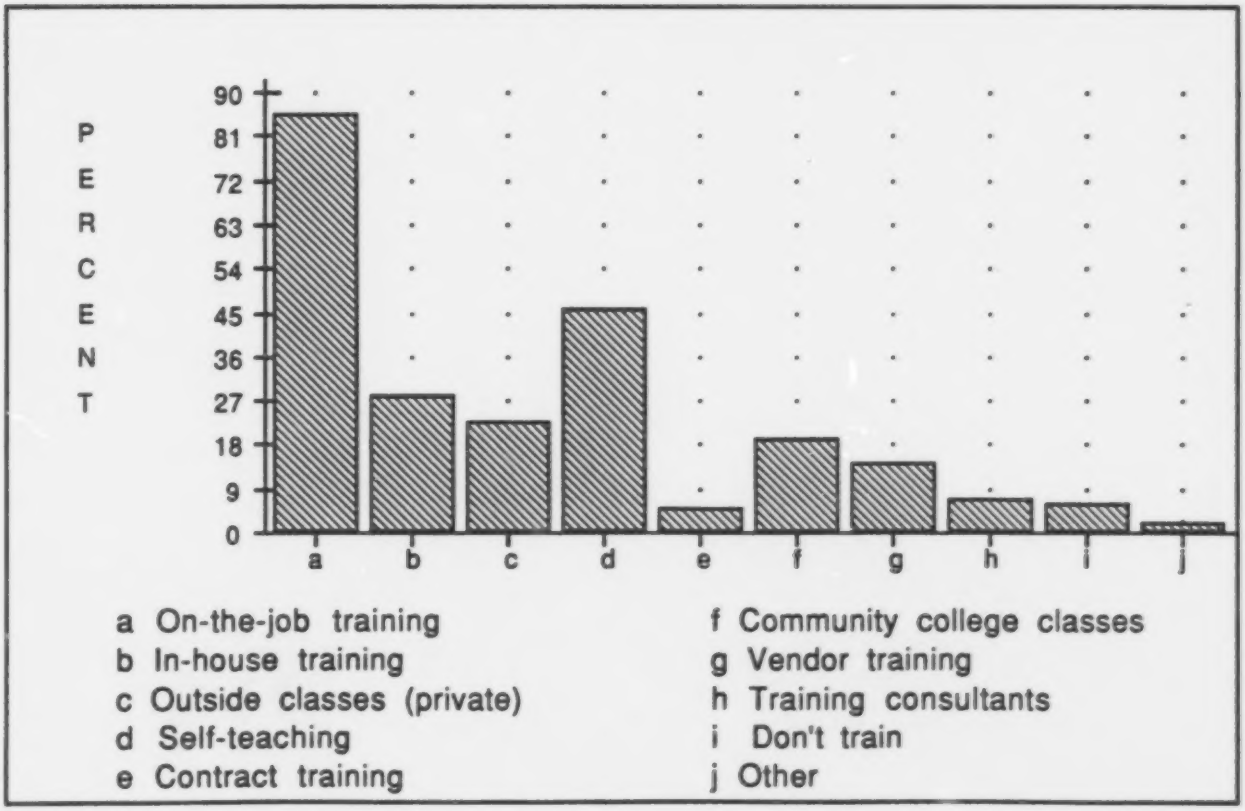


Chart 19

SATISFACTION WITH TRAINING METHODS USED
(State)

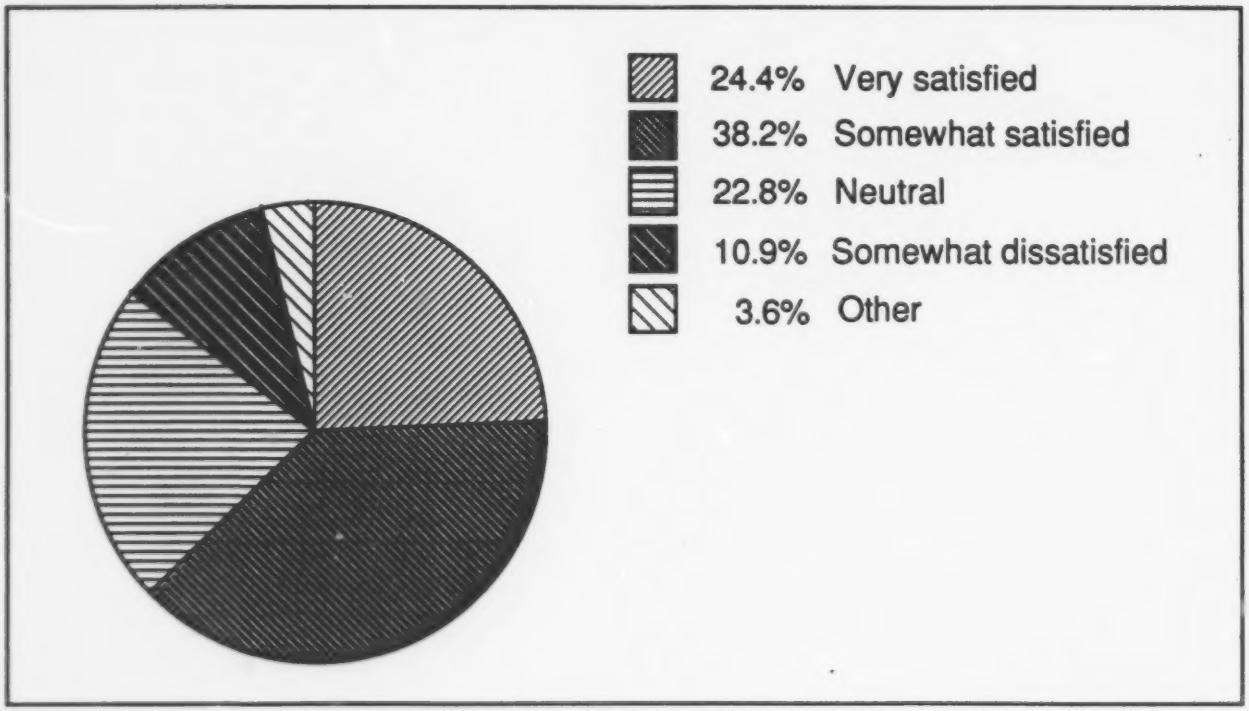


Chart 20

PRODUCTION TYPING
(Typewriter or Computer)

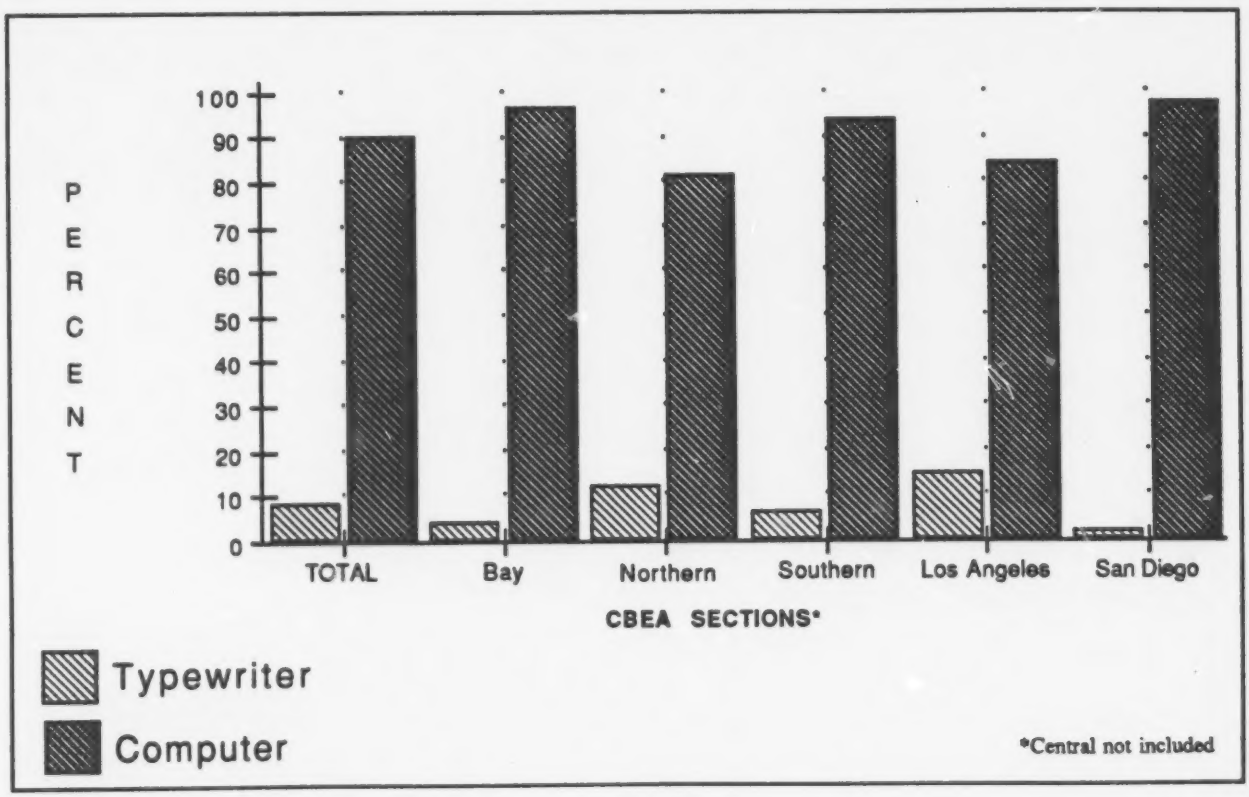


Chart 21

DISTRIBUTION BY SIZE
(688 responses)

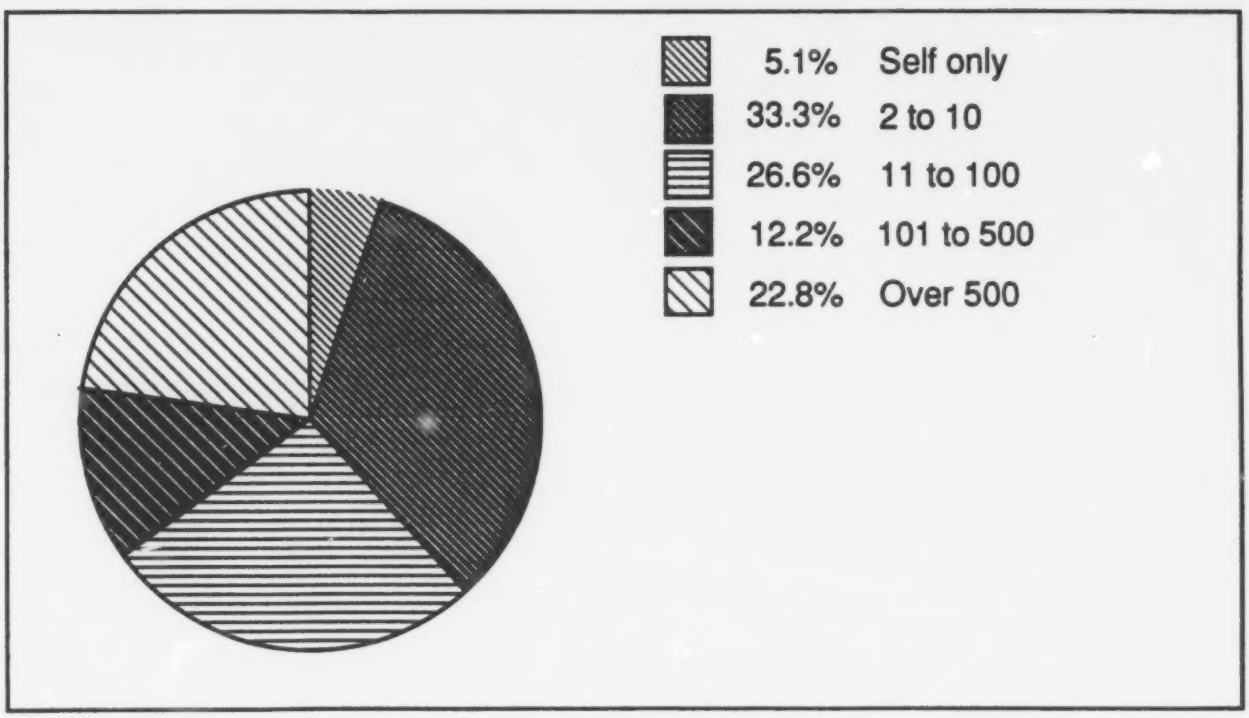
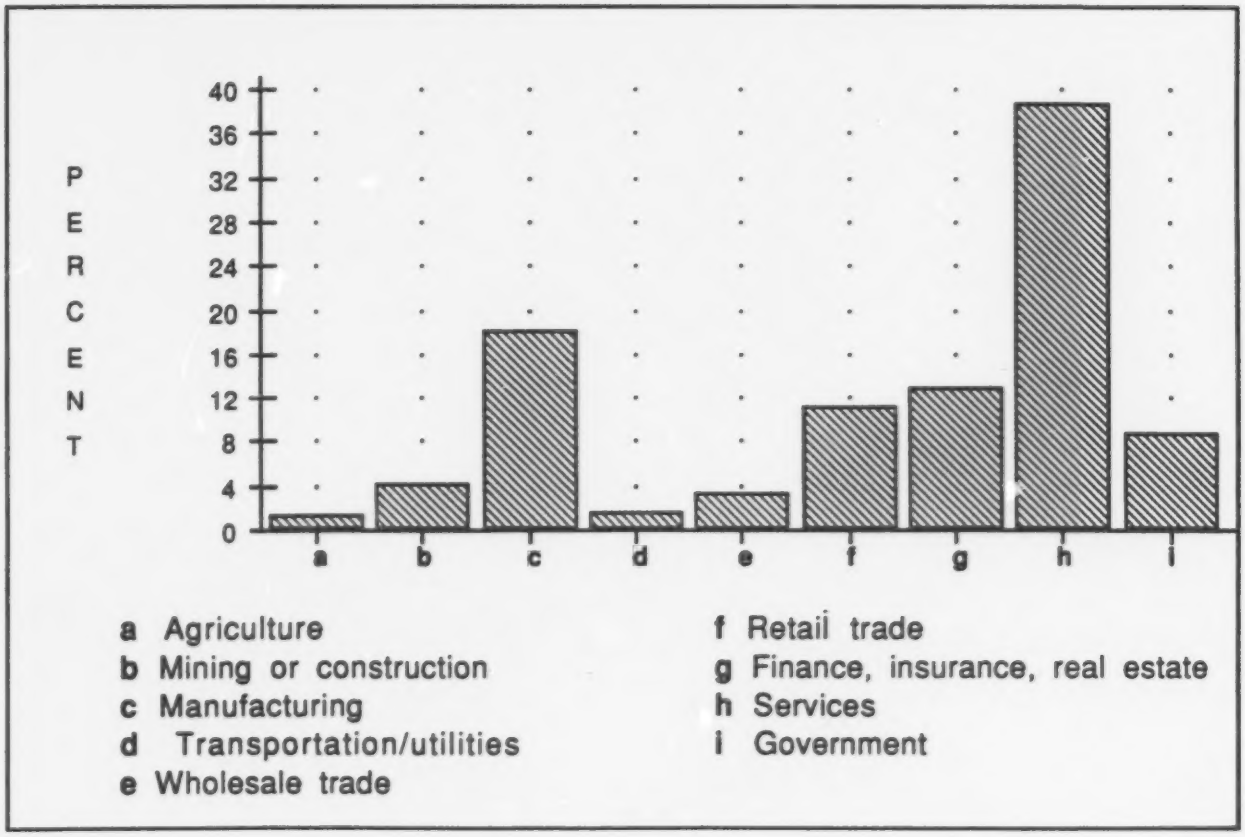


Chart 22

DISTRIBUTION BY INDUSTRY
(738 RESPONSES)



1992 MARKETING & MANAGEMENT SURVEY

Joyce Arntson
Coordinator

BEST COPY AVAILABLE

TABLE 1:

COMMON AREAS REQUIRED FOR EMPLOYMENT-- ALL T.O.P.S. CODES

Accounting/Finance	Computer Skills
Cross Cultural Awareness	Customer Service
Foreign Language	Interpersonal Skills
Organizational Skills	Verbal Skills
Writing Skills	

Note: The areas noted above were repeated as the five most important issues to be taught for employment across the T.O.P.S. codes. These were requested at the beginning of the survey before Question 1.

1992 MARKETING AND MANAGEMENT SURVEY
FOR BUSINESS AND INDUSTRY

Charts 1 - 22.

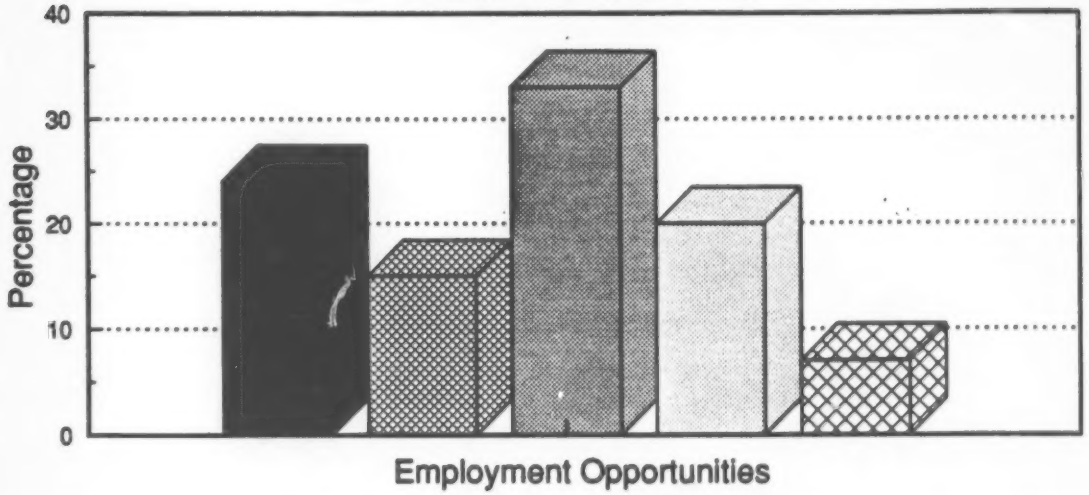
Questions 1 - 22: Please indicate for each of the following industry areas the level of job opportunities which can be expected over the next two years.

Graphic responses are provided by statewide percentages for each of the 22 T.O.P.S. codes on the following charts. Actual numbers of responses are also shown in the note at the bottom of each chart.

Chart 1

Tax Studies

1992 Marketing and Management Survey

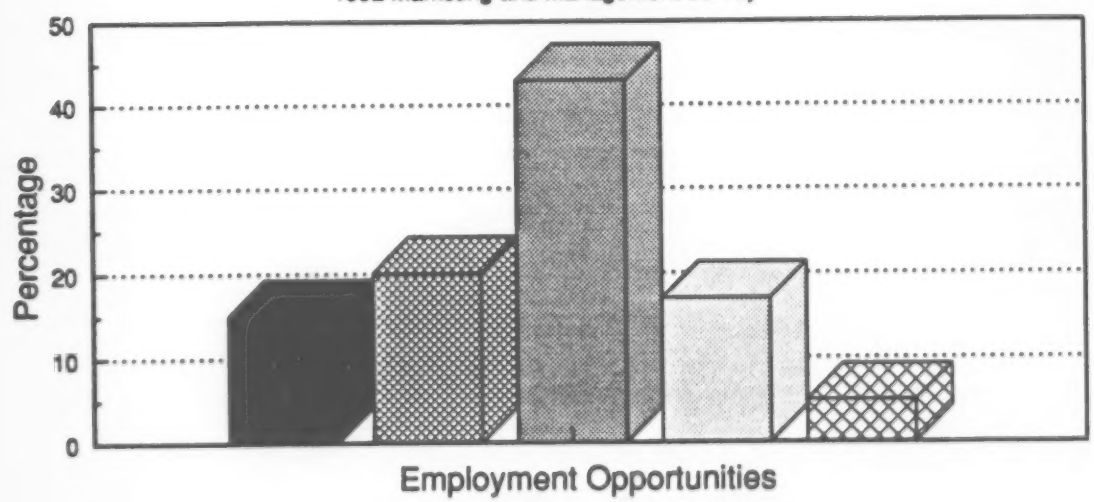


Statewide Percentage Response to Question No. 1, Employment Opportunities Expected Over Next Two Years for Tax Studies (Total Responses = 194).

Chart 2

Banking and Finance

1992 Marketing and Management Survey

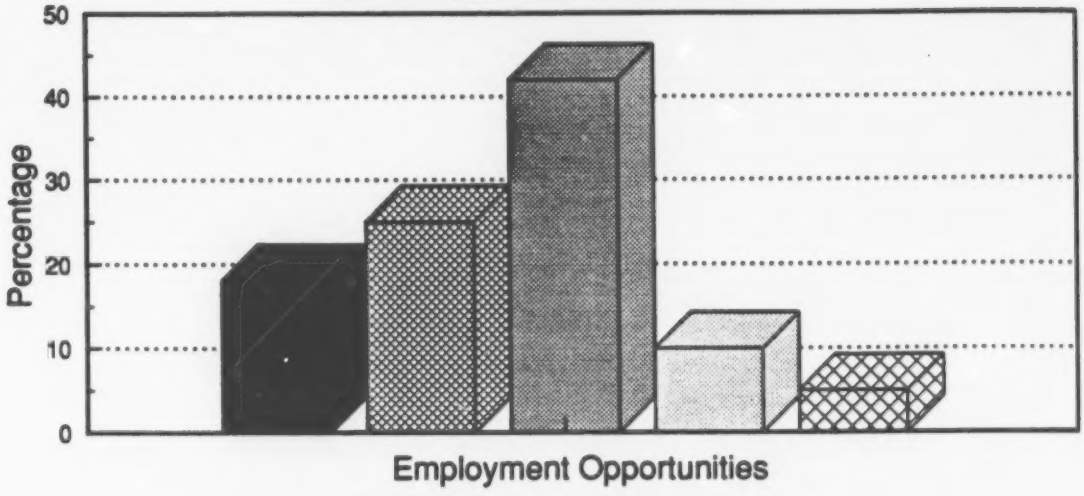


Statewide Percentage Response to Question No. 2, Employment Opportunities Next Two Years for Banking and Finance (Total Responses = 195).

Chart 3

Banking (Management)

1992 Marketing and Management Survey

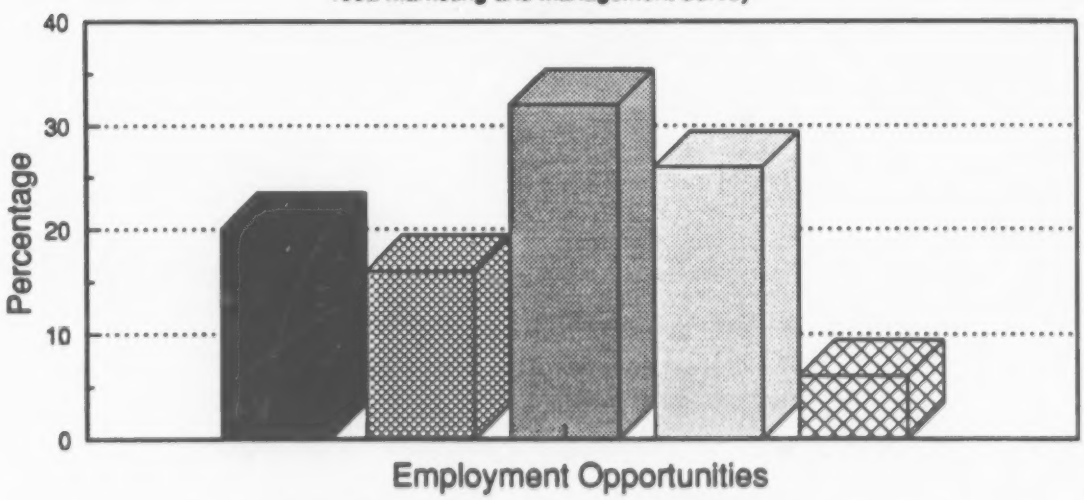


Statewide Percentage Response to Question No. 3, Employment Opportunities Next Two Years for Banking (Management) (Total Responses - 188).

Chart 4

Investment and Securities

1992 Marketing and Management Survey

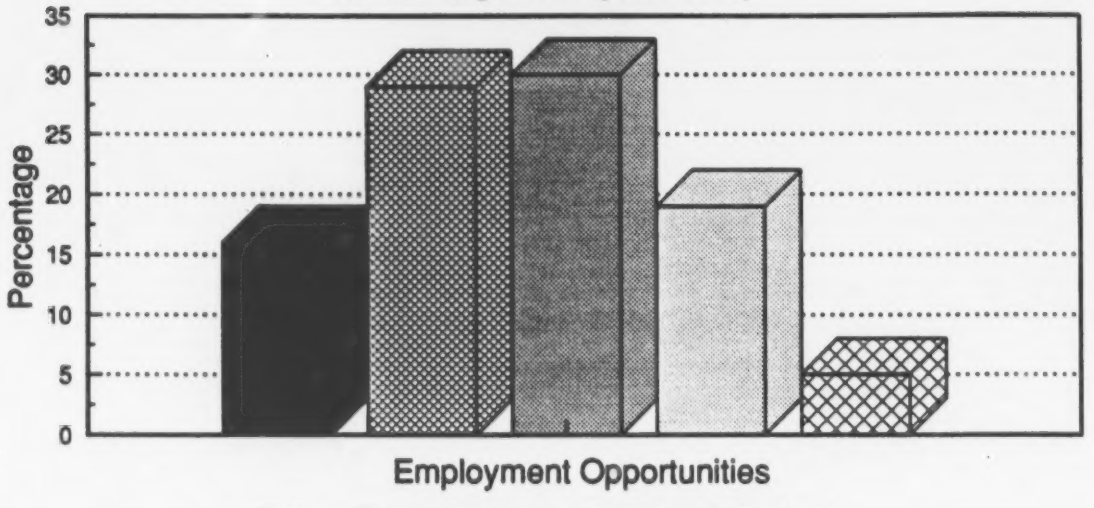


Statewide Percentage Response to Question No. 4, Employment Opportunities Next Two Years for Investment and Securities (Responses = 188).

Chart 5

Credit Management

1992 Marketing and Management Survey

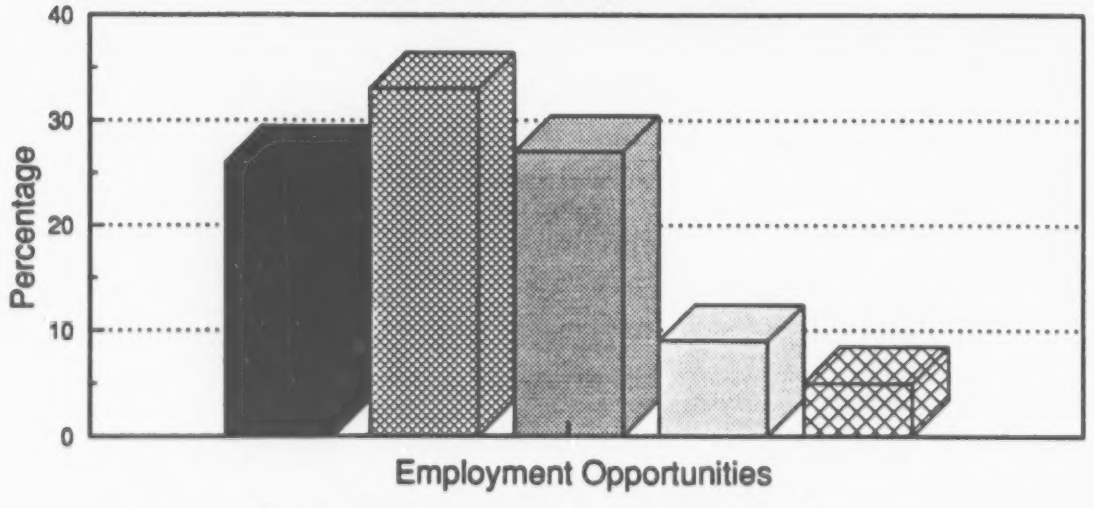


Statewide Percentage Response to Question No. 5, Employment Opportunities Next Two Years for Credit Management (Total Responses = 190).

Chart 6

Cashiering or Bank Telling

1992 Marketing and Management Survey

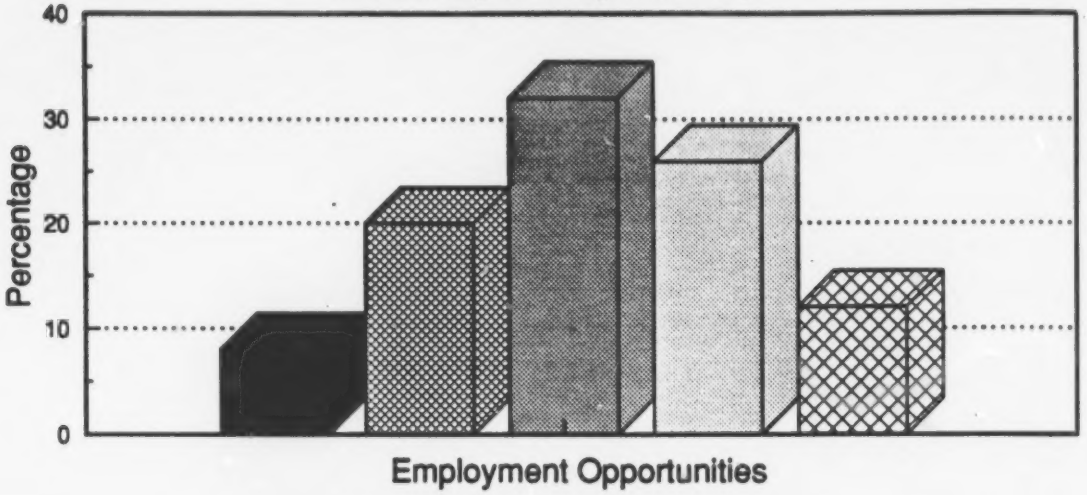


Statewide Percentage Response to Question No. 6, Employment Opportunities Next Two Years for Cashiering or Bank Telling (Responses = 187)

Chart 7

Business Management

1992 Marketing and Management Survey

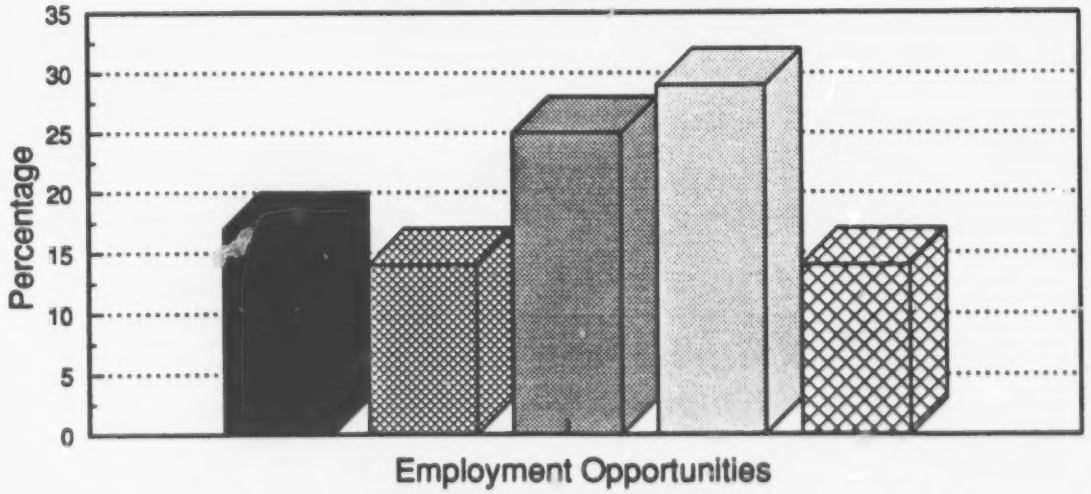


Statewide Percentage Response to Question No. 7, Employment Opportunities Next Two Years for Business Management (Total Responses = 202).

Chart 8

Small Business Management

1992 Marketing and Management Survey

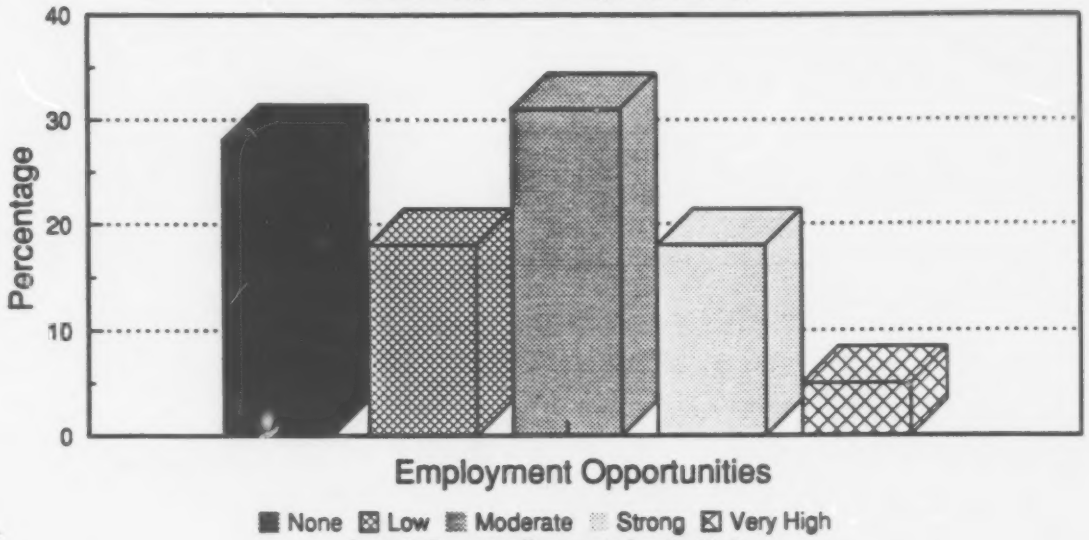


Statewide Percentage Response to Question No. 8, Employment Opportunities Expected Over Next Two Years for Small Bus. Management (Responses=180).

Chart 9

Hotel/Motel Management

1992 Marketing and Management Survey

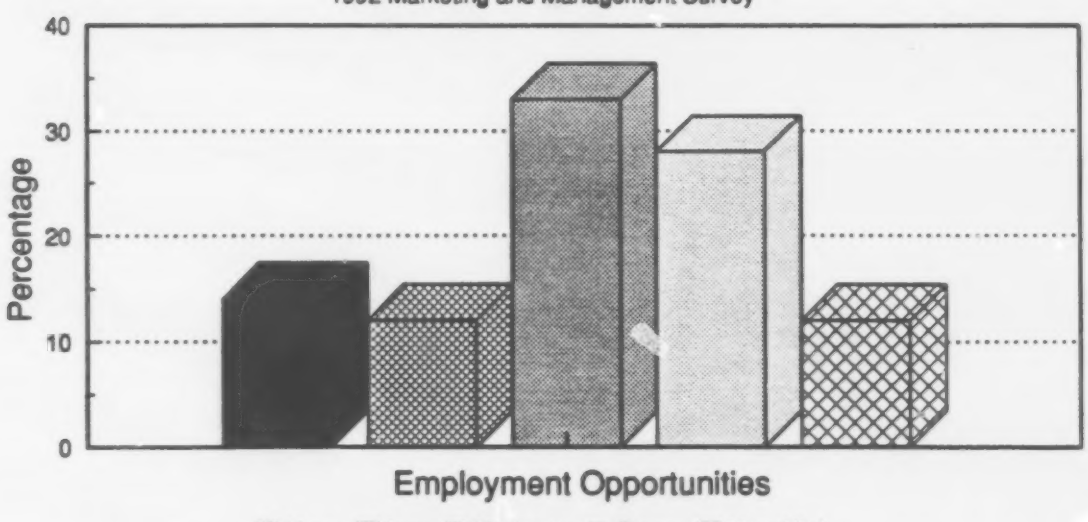


Statewide Percentage Response to Question No. 9, Employment Opportunities Expected Over Next Two Years for Hotel/Motel Mgmt. (Responses = 175).

Chart 10

Marketing and Distribution

1992 Marketing and Management Survey

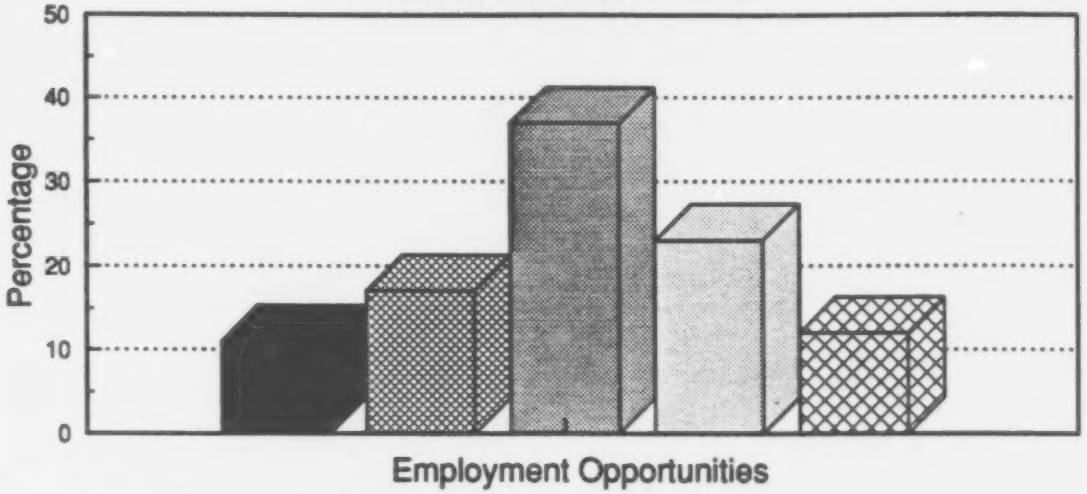


Statewide Percentage Response for Question 10, Employment Opportunities Expected Over Next Two Years for Mktg. and Dist. (Responses = 192).

Chart 11

Advertising

1992 Marketing and Management Survey

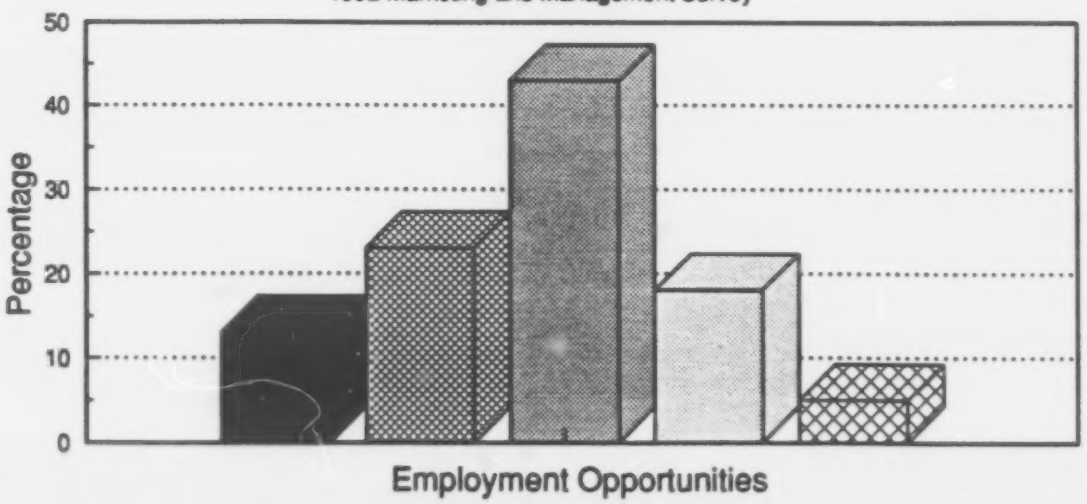


Statewide Percentage Response for Question 11, Employment Opportunities Expected Over Next Two Years for Advertising (Total Responses = 188).

Chart 12

Purchasing

1992 Marketing and Management Survey

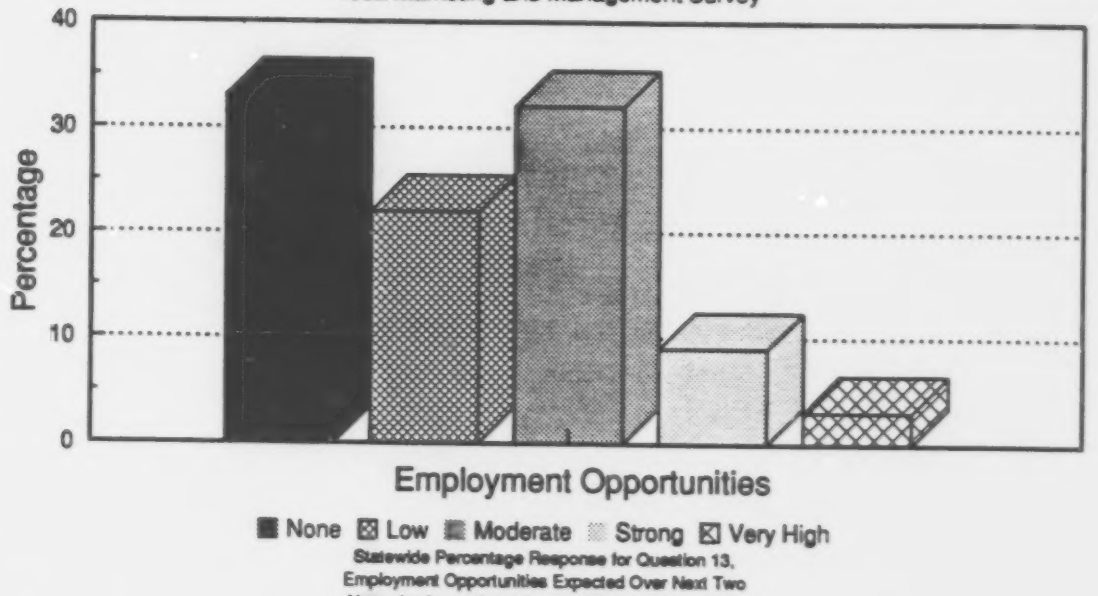


Statewide Percentage Response for Question 12, Employment Opportunities Expected Over Next Two Years for Purchasing (Total Responses = 192).

Chart 13

Apparel and Accessories

1992 Marketing and Management Survey

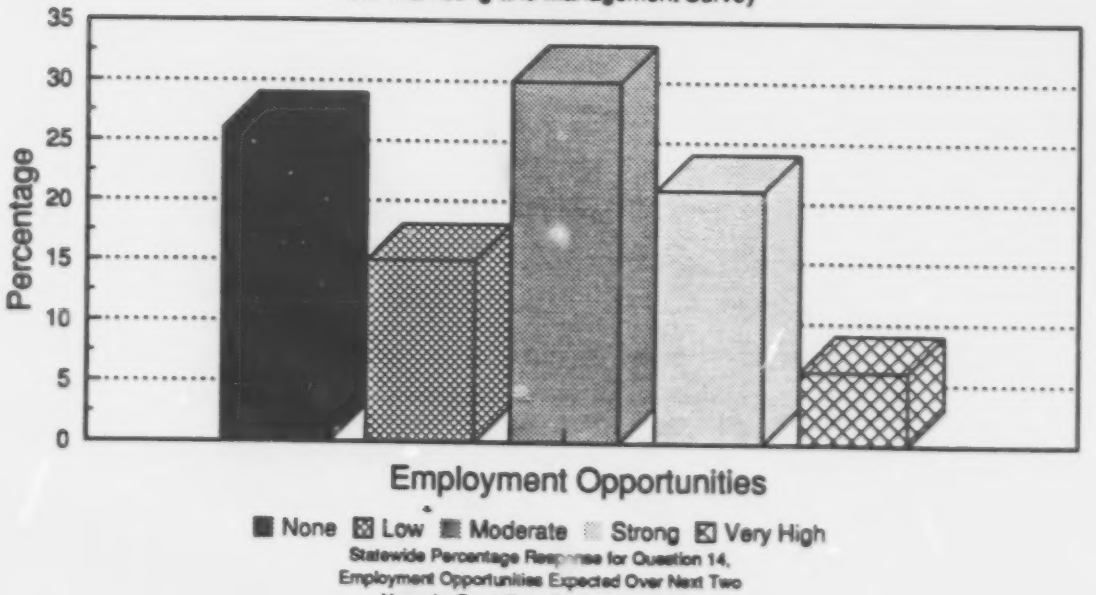


Statewide Percentage Response for Question 13, Employment Opportunities Expected Over Next Two Years for Apparel and Access. (Responses = 184).

Chart 14

Food (Wholesale and Retail)

1992 Marketing and Management Survey

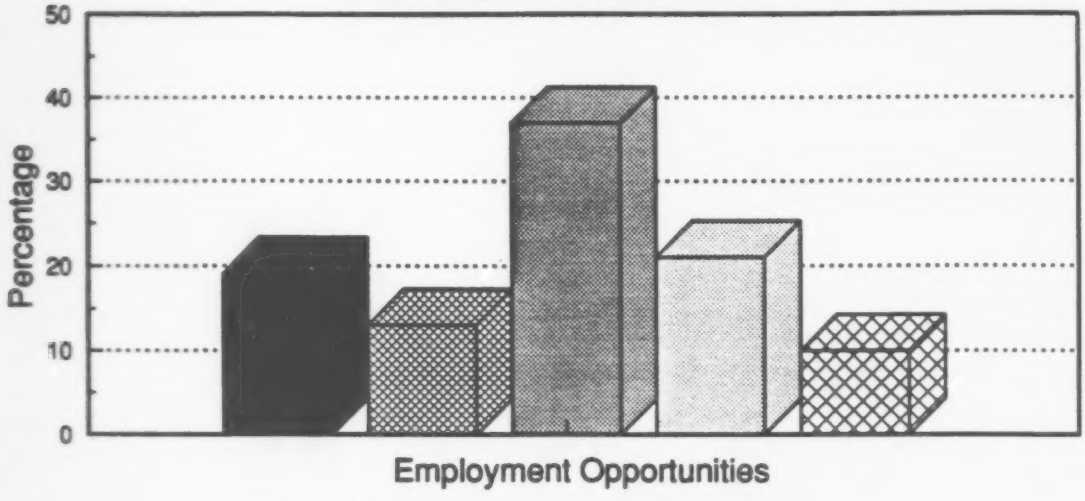


Statewide Percentage Response for Question 14, Employment Opportunities Expected Over Next Two Years for Food (Total Responses = 182).

Chart 15

Merchandising (Including Sales)

1992 Marketing and Management Survey

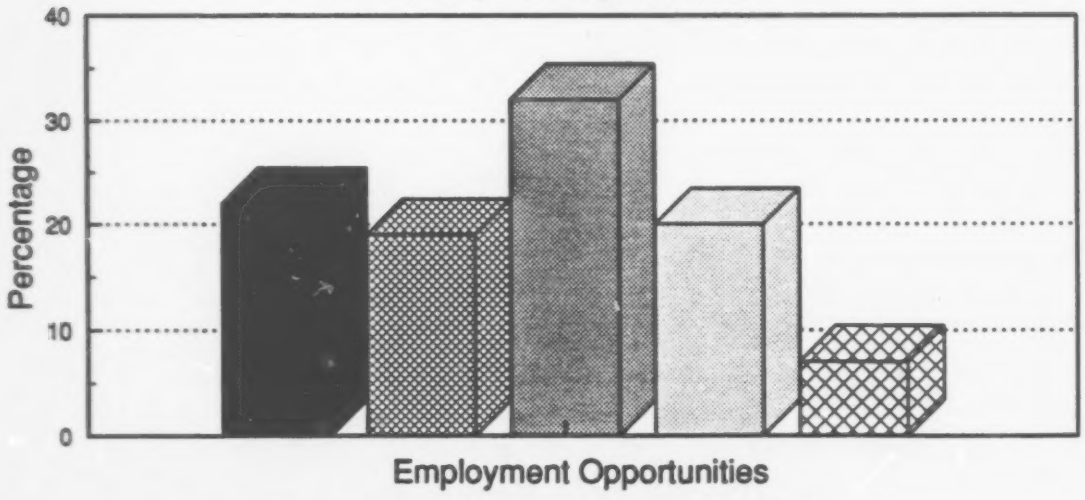


Statewide Percentage Response to Question 15, Employment Opportunities Expected Over Next Two Years for Merchandising (Total Responses = 197).

Chart 16

Transportation and Materials Moving

1992 Marketing and Management Survey

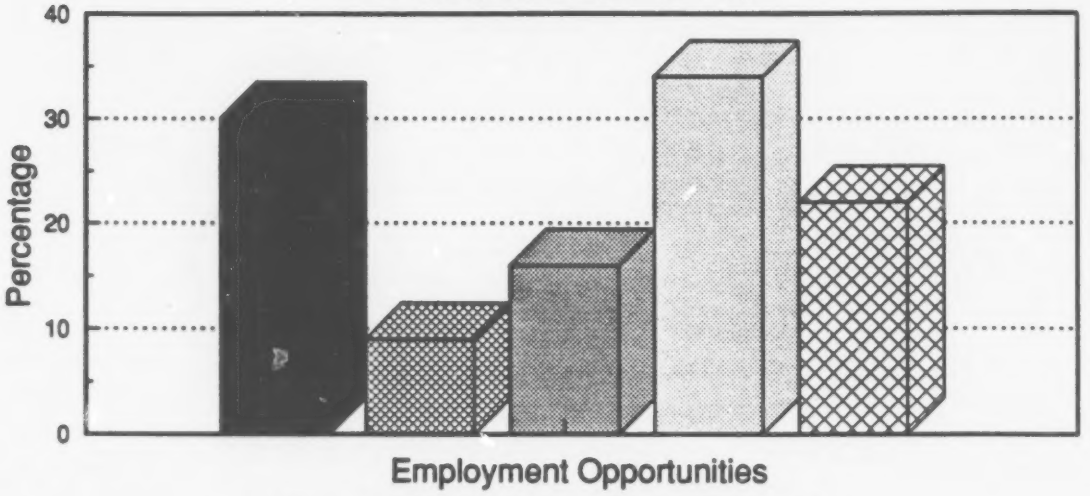


Statewide Percentage Response to Question 16, Employment Opportunities Expected Over Next Two Years for Trans. and Mtls. Mvg. (Responses=188).

Chart 17

International Trade

1992 Marketing and Management Survey

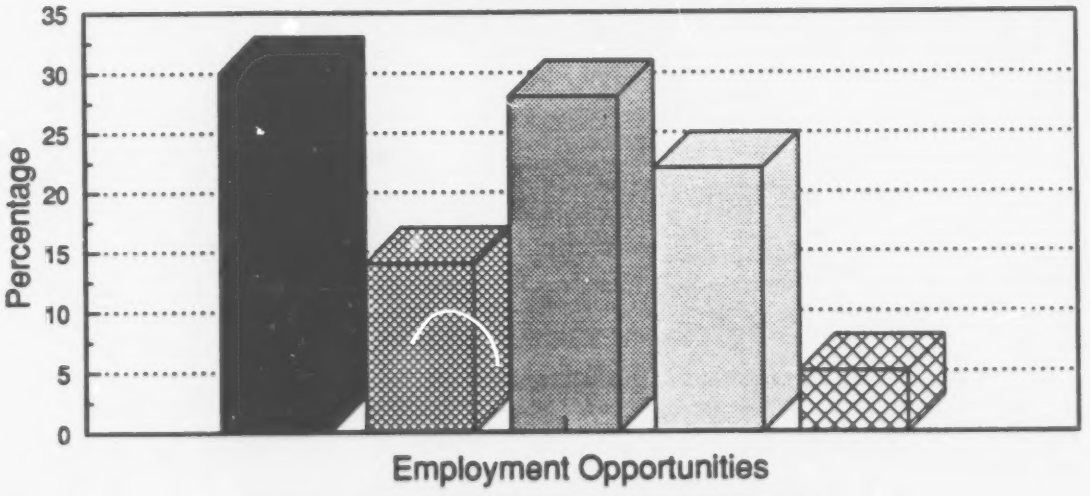


Statewide Percentage Response to Question 17, Employment Opportunities Expected Over Next Two Years for International Trade (Responses=171).

Chart 18

Traffic Management

1992 Marketing and Management Survey

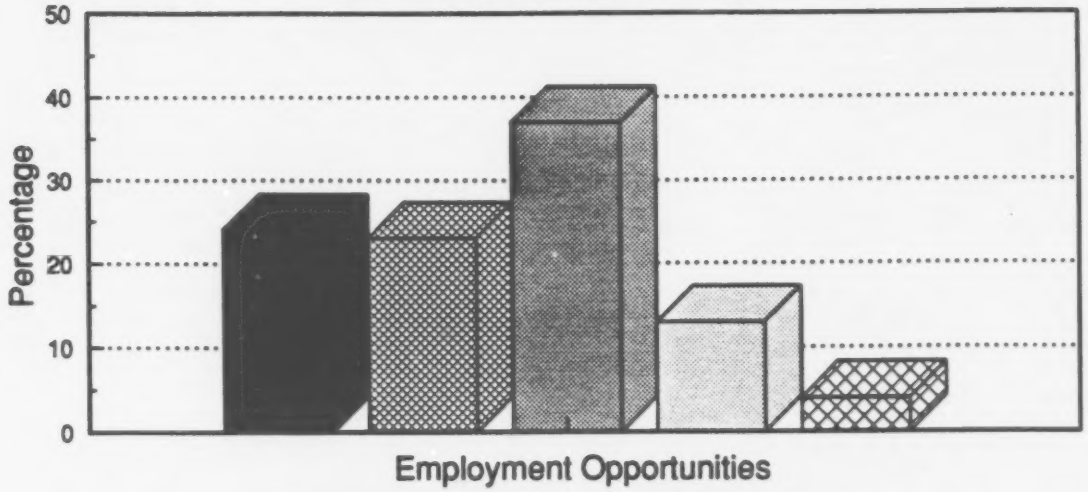


Statewide Percentage Response to Question 18, Employment Opportunities Expected Over Next Two Years for Traffic Mgmt. (Responses = 183).

Chart 19

Material Support

1992 Marketing and Management Survey

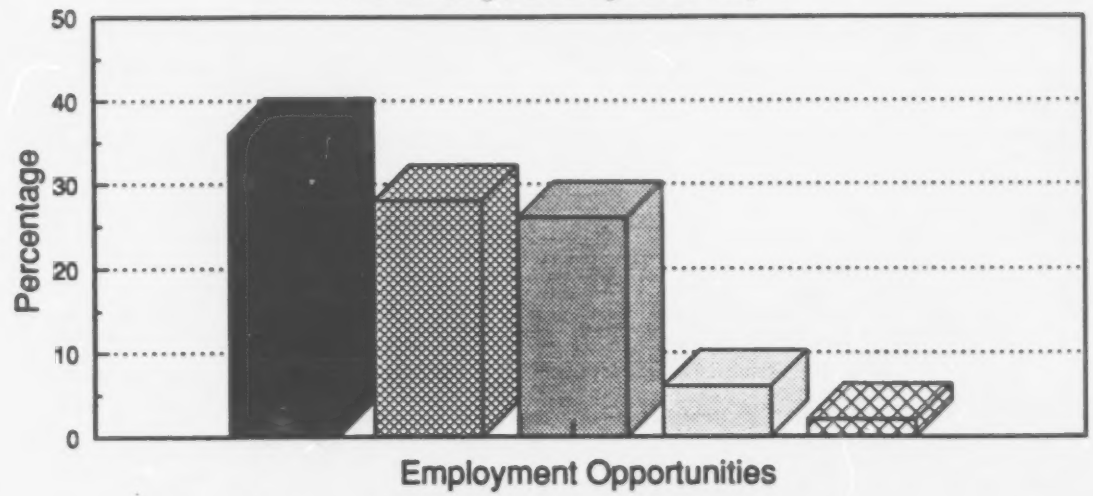


Statewide Percentage Response for Question 19, Employment Opportunities Expected Over Next Two Years for Material Support (Responses = 172).

Chart 20

Airline Ground Crew

1992 Marketing and Management Survey

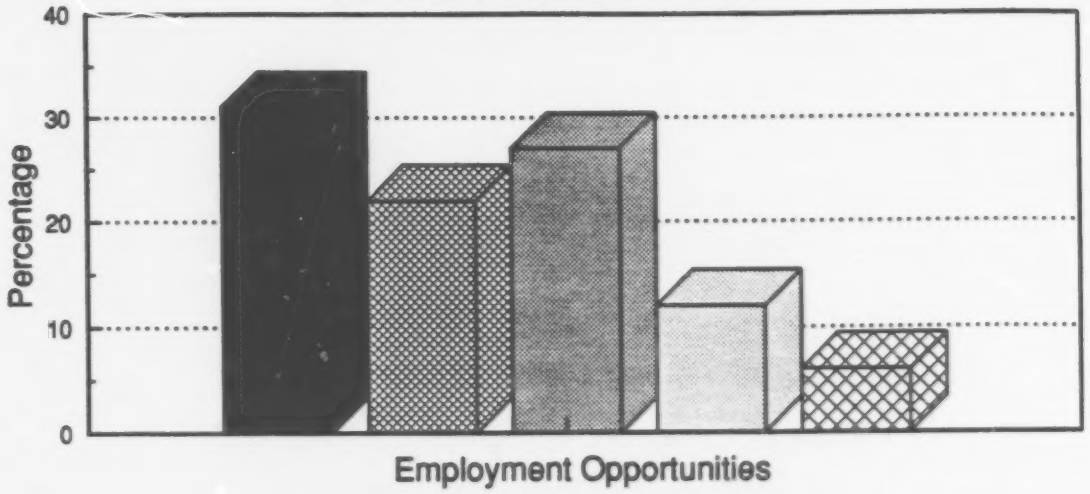


Statewide Percentage Response for Question 20, Employment Opportunities Expected Over Next Two Years for Airline Grnd. Crew (Responses = 182).

Chart 21

Real Estate

1992 Marketing and Management Survey

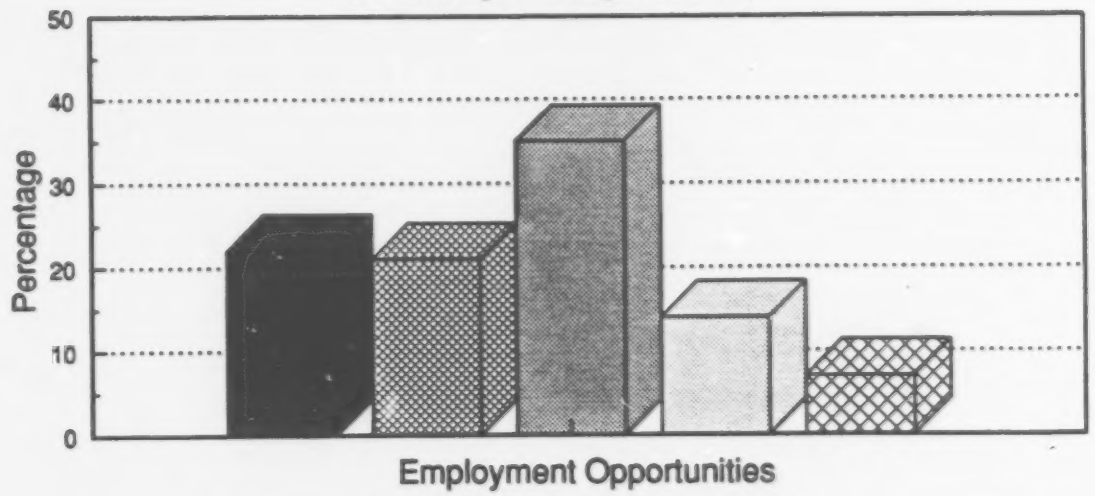


Statewide Percentage Response for Question 21, Employment Opportunities Expected Over Next Two Years for Real Estate (Total Responses = 190).

Chart 22

Insurance

1992 Marketing and Management Survey



Statewide Percentage Response for Question 22, Employment Opportunities Expected Over Next Two Years for Insurance (Total Responses = 189).

Charts 23 - 44.

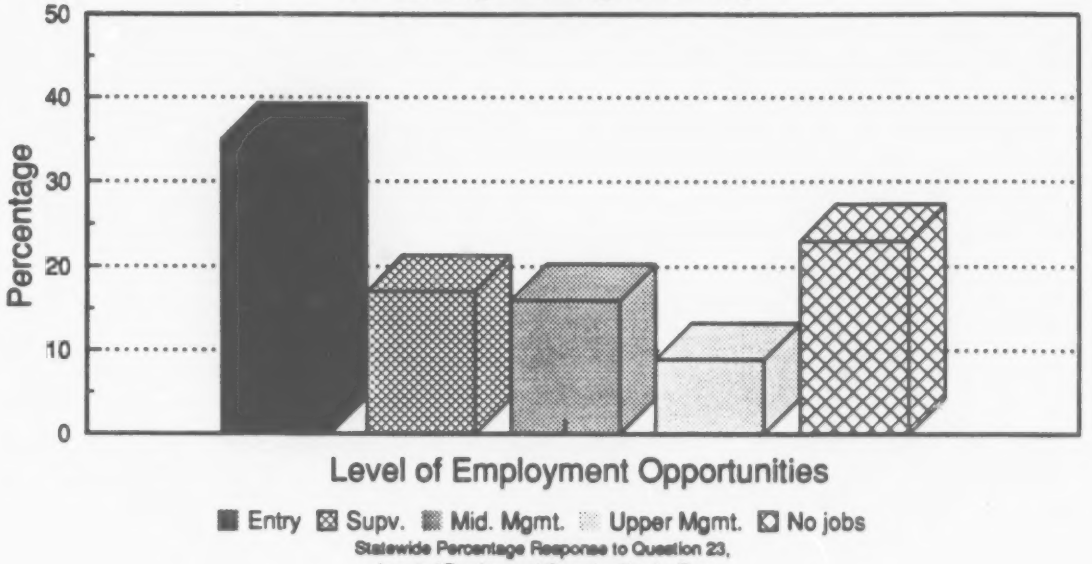
Questions 23 - 44: Please indicate the level of employment at which job opportunities occur for an applicant with education in each of the 22 areas listed in the question above.

Graphic responses are provided by statewide percentages for each of the 22 T.O.P.S. codes on the following charts. Actual numbers of responses are also shown in the note at the bottom of each chart.

Chart 23

Tax Studies

1992 Marketing and Management Survey

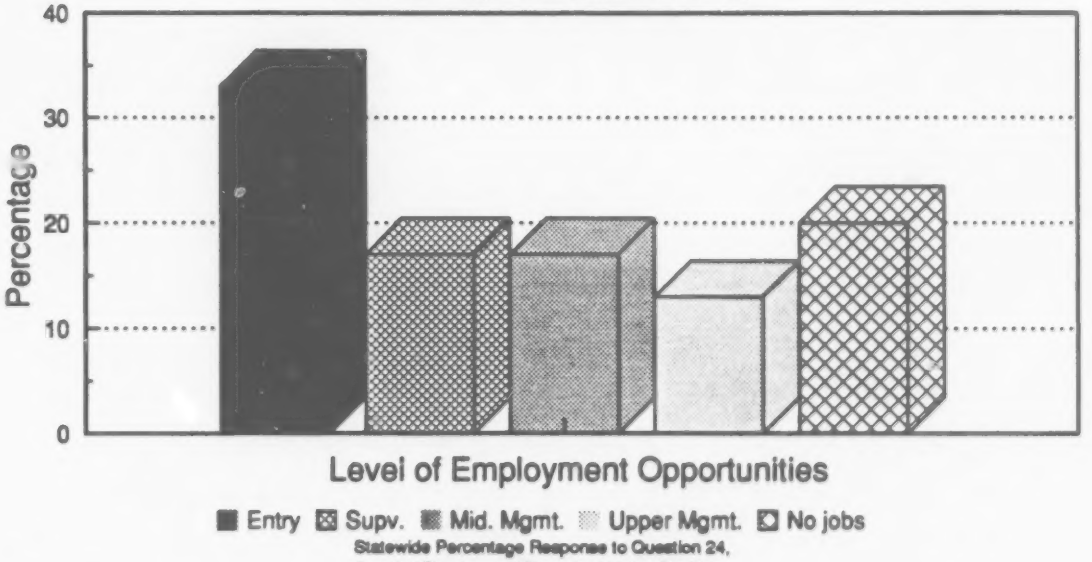


Statewide Percentage Response to Question 23, Level of Employment Opportunities for Tax Studies (Total Responses = 128)

Chart 24

Banking and Finance

1992 Marketing and Management Survey

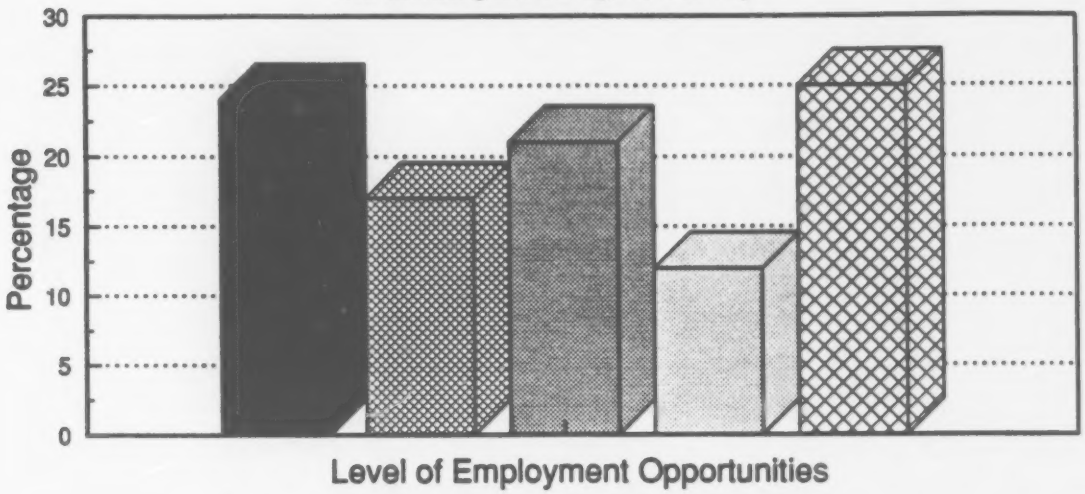


Statewide Percentage Response to Question 24, Level of Employment Opportunities for Banking and Finance (Total Responses = 126)

Chart 25

Banking (Management)

1992 Marketing and Management Survey

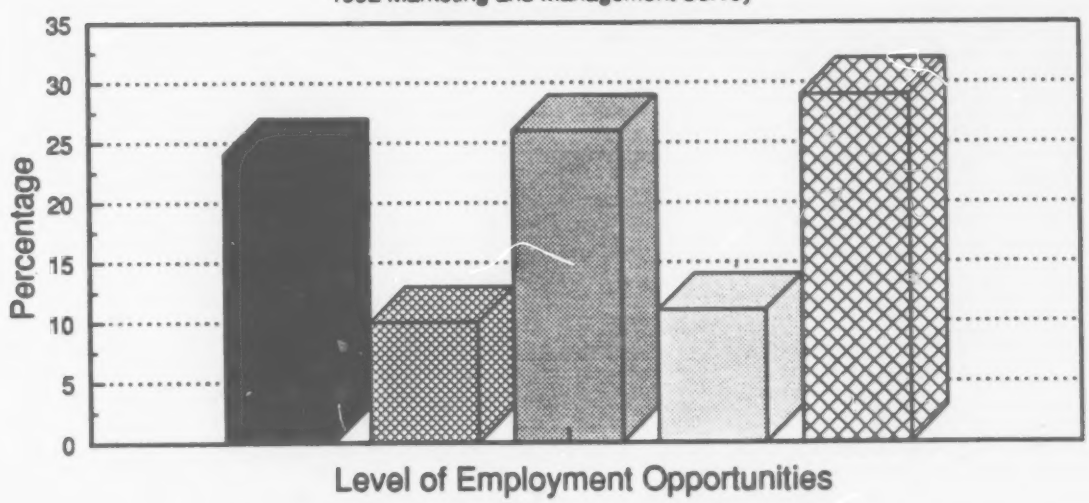


Statewide Percentage Response to Question 25, Level of Employment Opportunities for Banking (Management) (Total Responses = 120)

Chart 26

Investment and Securities

1992 Marketing and Management Survey

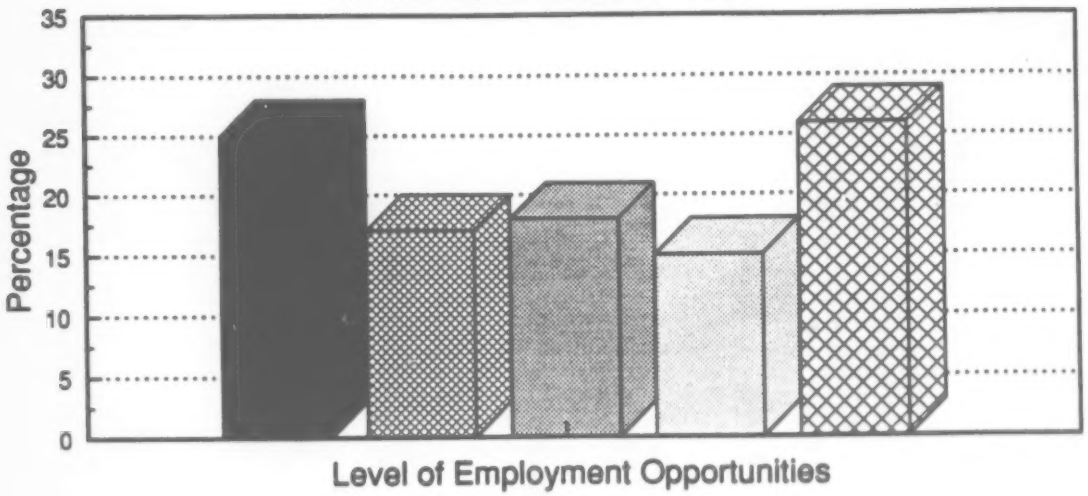


Statewide Percentage Response to Question 26, Level of Employment Opportunities for Investment and Securities (Total Responses = 117)

Chart 27

Credit Management

1992 Marketing and Management Survey



Statewide Percentage Response for Question 27
Level of Employment Opportunities for
Credit Management (Total Responses = 117)

Chart 28

Cashiering or Bank Telling

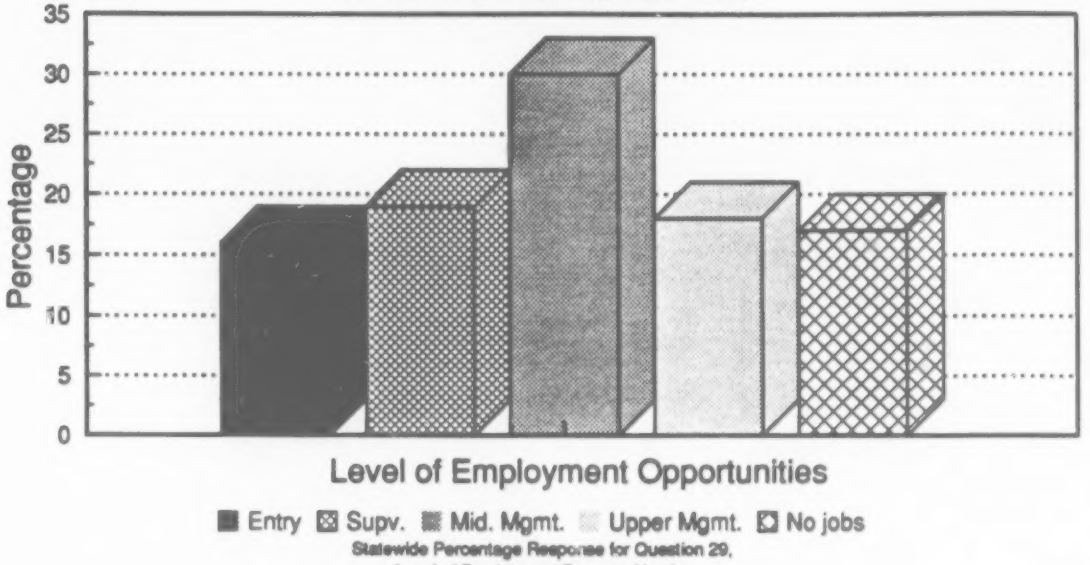
1992 Marketing and Management Survey

Statewide Percentage Response for Question 28,
Level of Employment Opportunities for Cashiering
or Bank Telling (Total Responses = 120)

Chart 29

Business Management

1992 Marketing and Management Survey

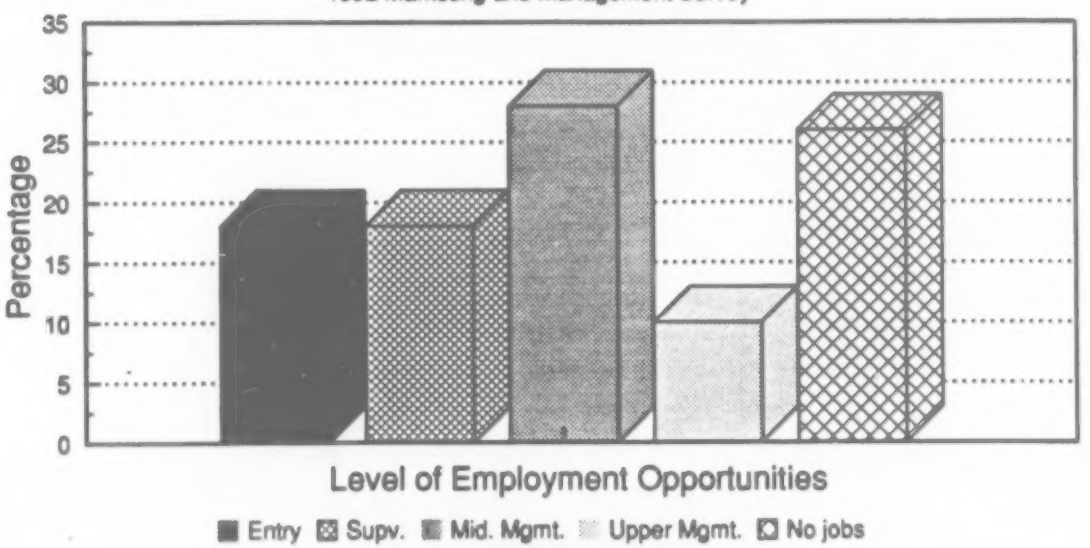


Statewide Percentage Response for Question 29,
Level of Employment Opportunities for
Business Management (Total Responses = 134)

Chart 30

Small Business Management

1992 Marketing and Management Survey

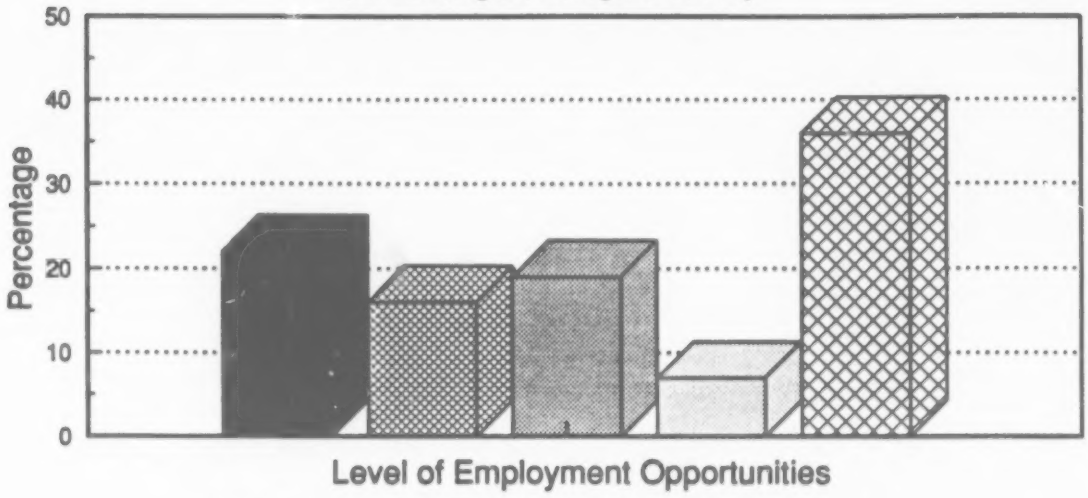


Statewide Percentage Response for Question 30,
Level of Employment Opportunities for Small
Business Management (Total Responses = 119)

Chart 31

Hotel/Motel Management

1992 Marketing and Management Survey

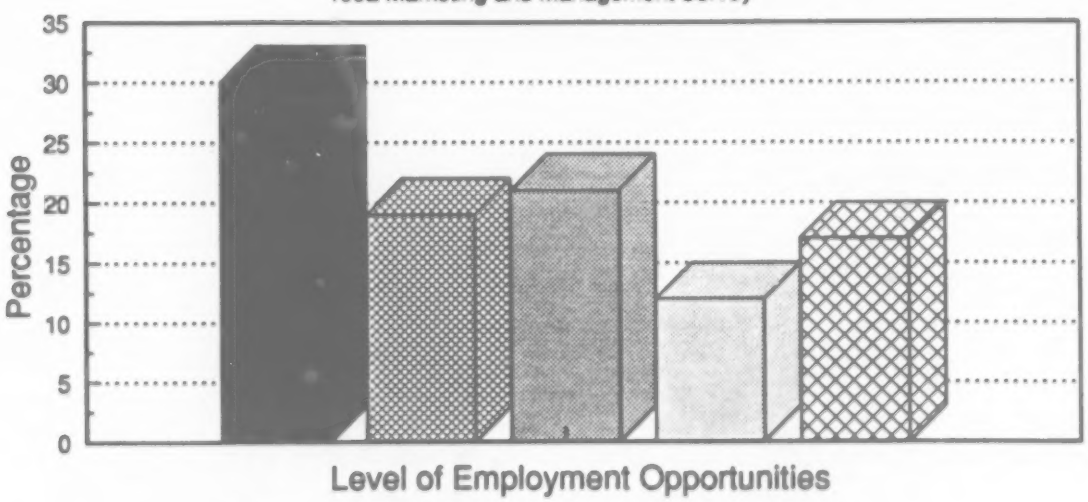


Statewide Percentage Response for Question 31, Level of Employment Opportunities for Hotel/ Motel Management (Total Responses = 119)

Chart 32

Marketing and Distribution

1992 Marketing and Management Survey

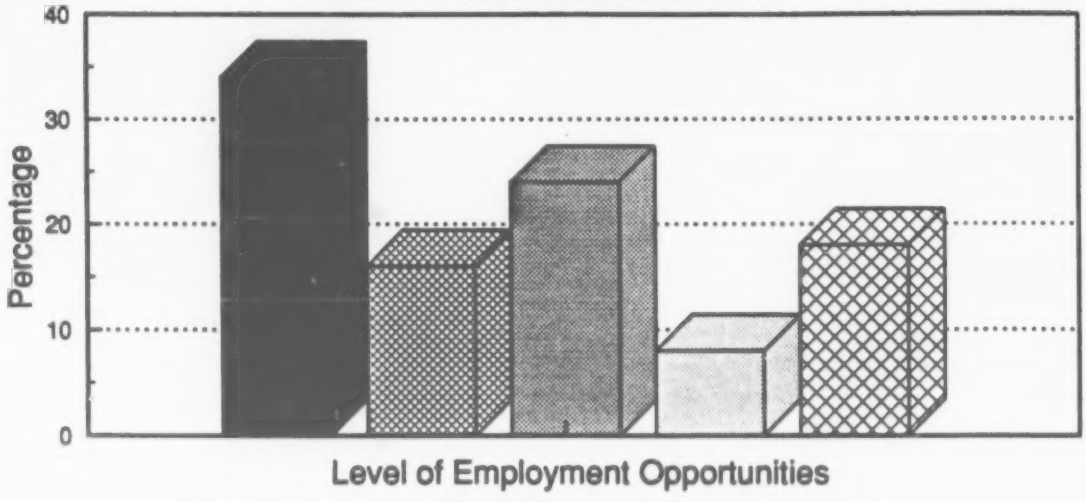


Statewide Percentage Response for Question 32, Level of Employment Opportunities for Marketing and Distribution (Total Responses = 126)

Chart 33

Advertising

1992 Marketing and Management Survey

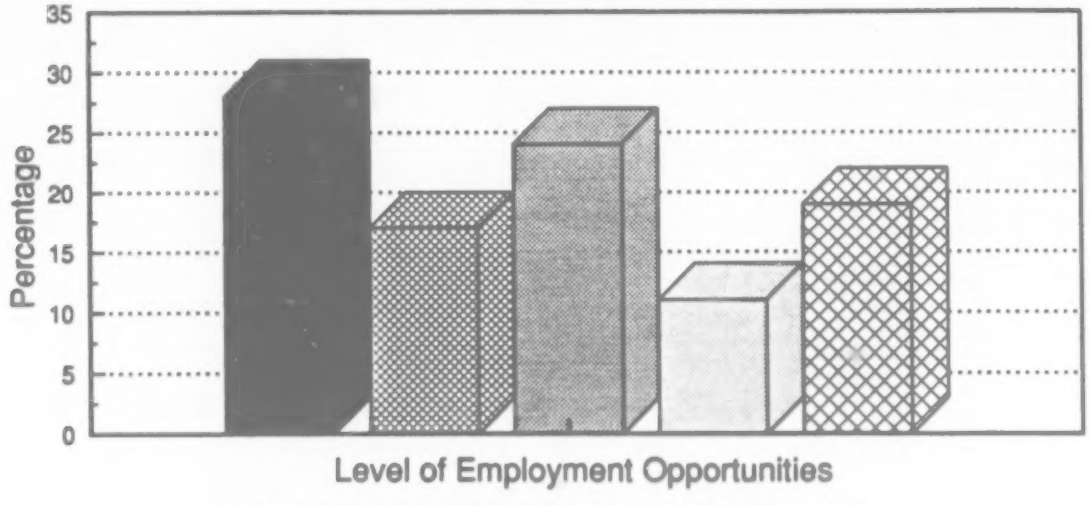


Statewide Percentage Response for Question 33,
Level of Employment Opportunities for
Advertising (Total Responses = 119)

Chart 34

Purchasing

1992 Marketing and Management Survey

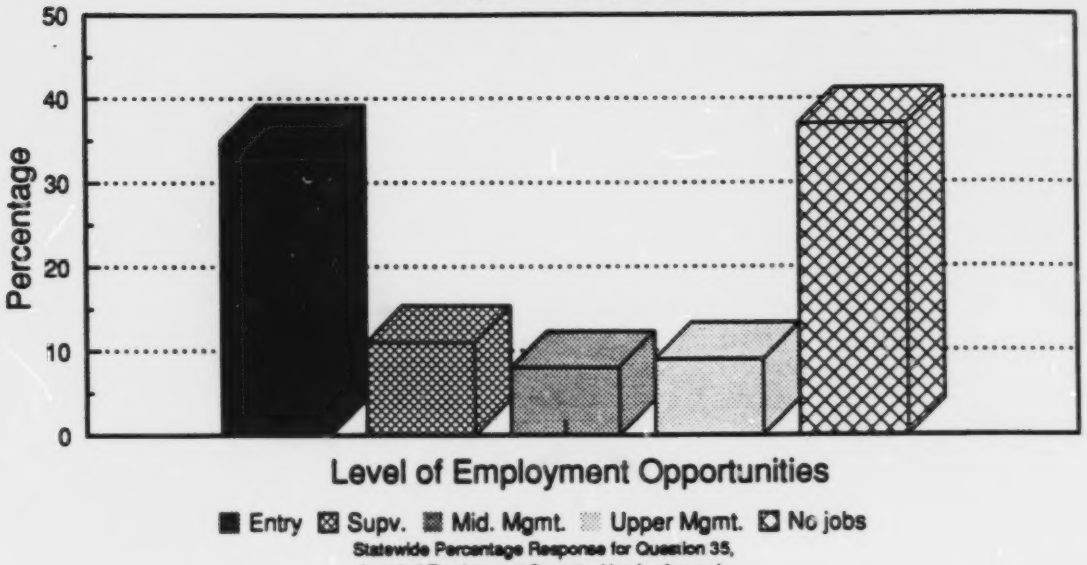


Statewide Percentage Response for Question 34,
Level of Employment Opportunities for
Purchasing (Total Responses = 120)

Chart 35

Apparel and Accessories

1992 Marketing and Management Survey

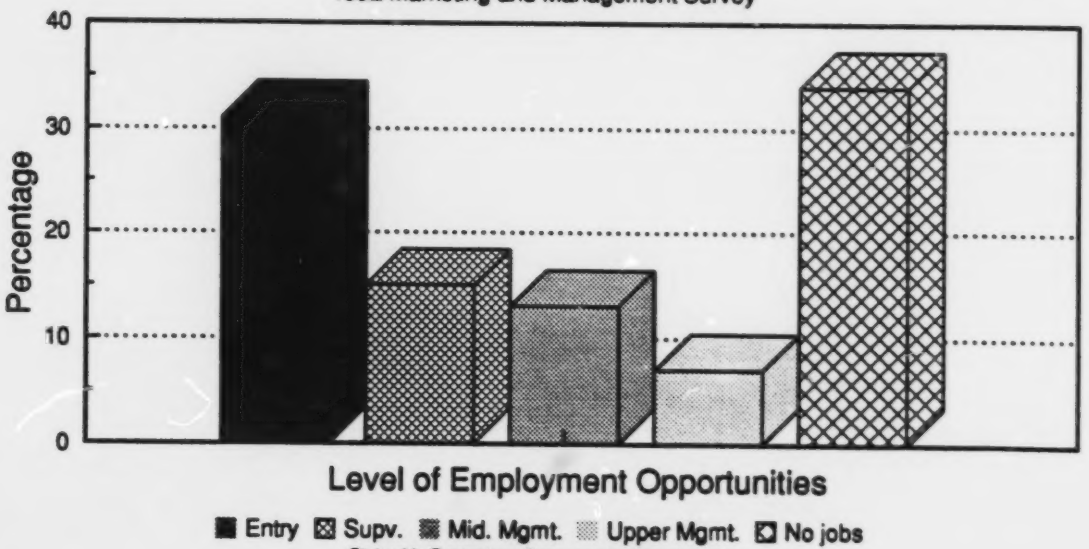


Statewide Percentage Response for Question 35,
Level of Employment Opportunities for Apparel
and Accessories (Total Responses = 112)

Chart 36

Food (Wholesale and Retail)

1992 Marketing and Management Survey

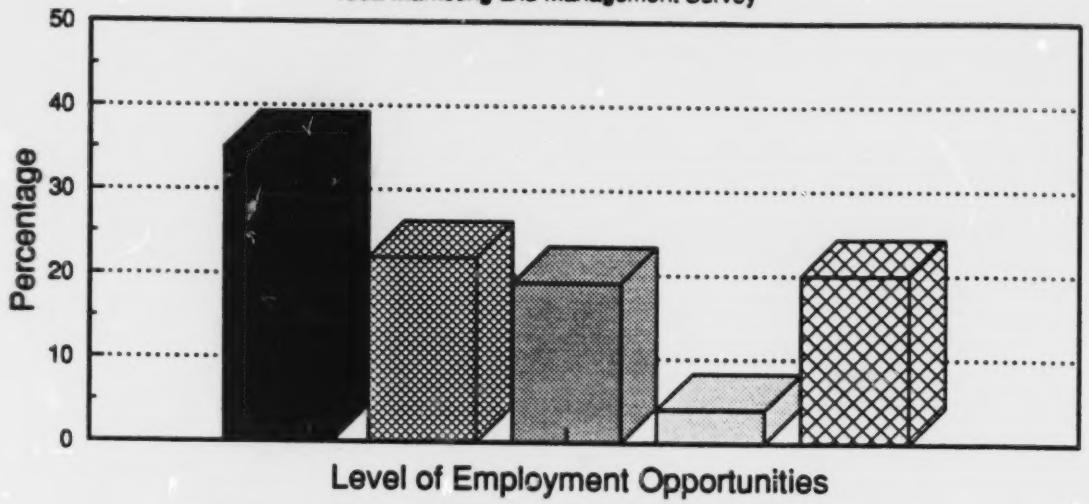


Statewide Percentage Response for Question 36,
Level of Employment Opportunities for
Food (Total Responses = 116)

Chart 37

Merchandising (Including Sales)

1992 Marketing and Management Survey

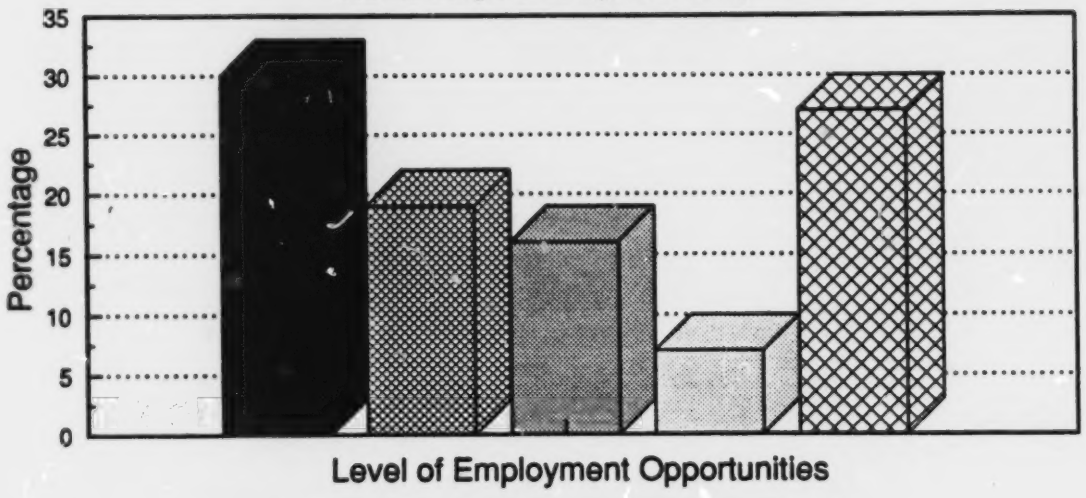


Statewide Percentage Response for Question 37, Level of Employment Opportunities for Merchandising (Total Responses = 122)

Chart 38

Transportation and Materials Moving

1992 Marketing and Management Survey

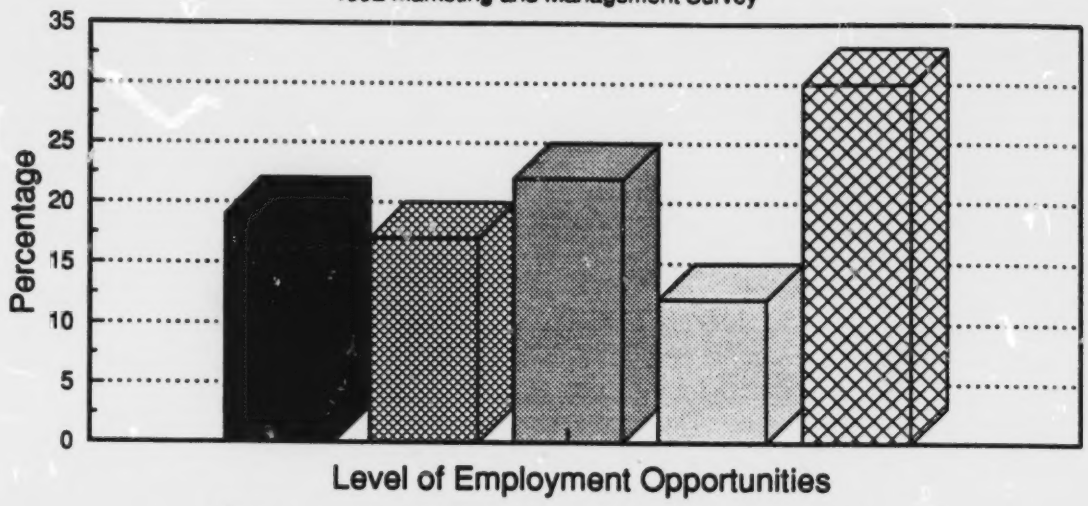


Statewide Percentage Response for Question 38, Level of Employment Opportunities for Transportation and Matls. Moving (Total Responses = 120)

Chart 39

International Trade

1992 Marketing and Management Survey

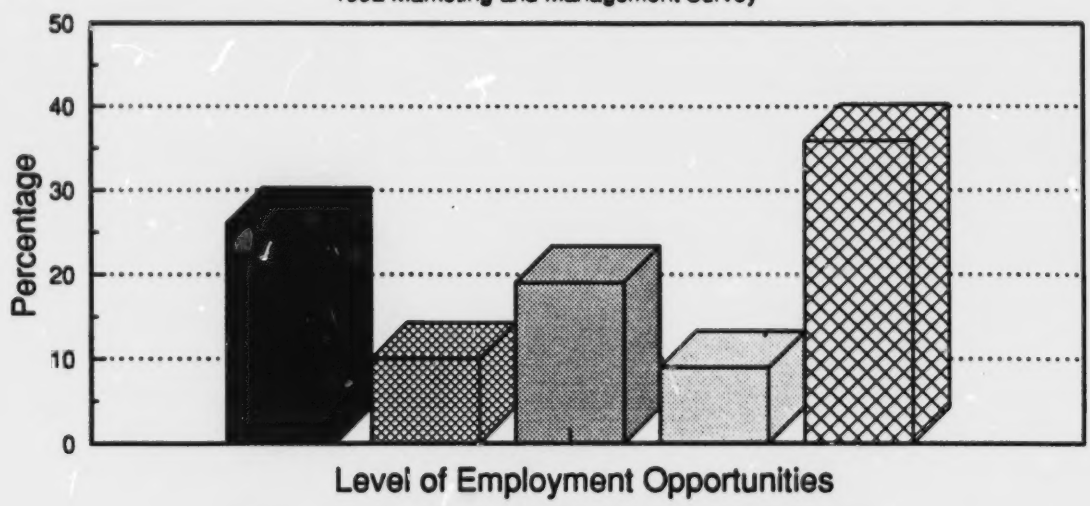


Statewide Percentage Response for Question 39,
Level of Employment Opportunities for
International Trade (Total Responses = 124)

Chart 40

Traffic Management

1992 Marketing and Management Survey

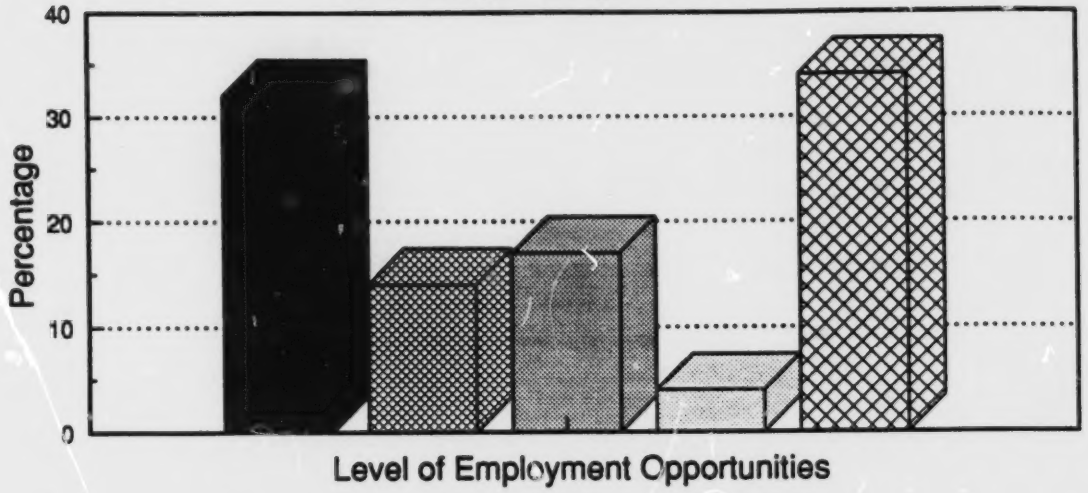


Statewide Percentage Response for Question 40,
Level of Employment Opportunities for
Traffic Management (Total Responses = 117)

Chart 41

Material Support

1992 Marketing and Management Survey



Level of Employment Opportunities

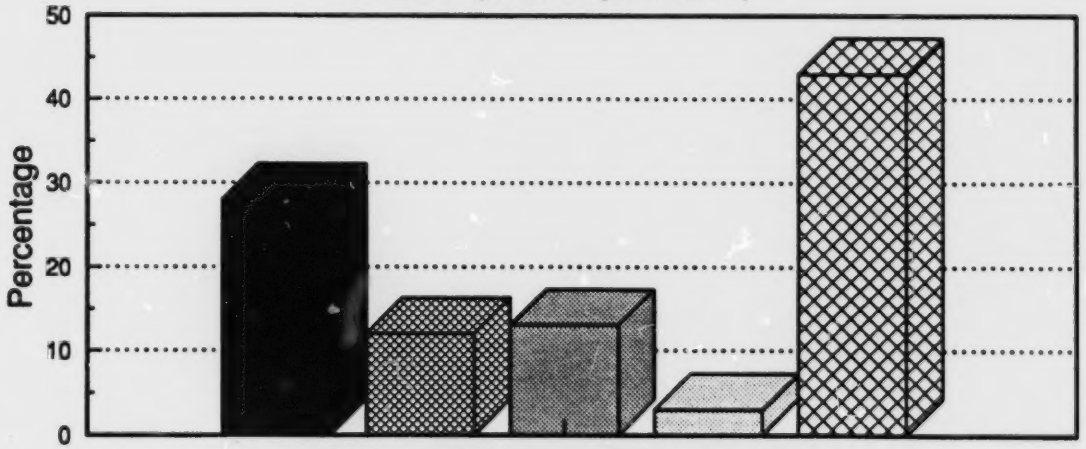
■ Entry ▨ Supv. ▩ Mid. Mgmt. ▒ Upper Mgmt. ▣ No jobs

Statewide Percentage Response for Question 41
Level of Employment Opportunities for
Material Support (Total Responses = 121)

Chart 42

Airline Ground Crew

1992 Marketing and Management Survey



Level of Employment Opportunities

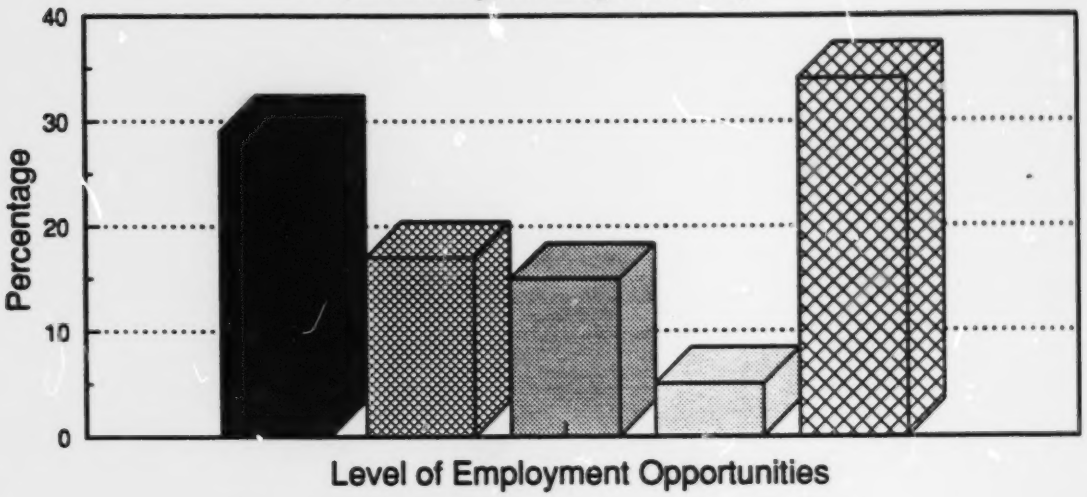
■ Entry ▨ Supv. ▩ Mid. Mgmt. ▒ Upper Mgmt. ▣ No jobs

Statewide Percentage Response for Question 42,
Level of Employment Opportunities for
Airline Ground Crew (Total Responses = 123)

Chart 43

Real Estate

1992 Marketing and Management Survey

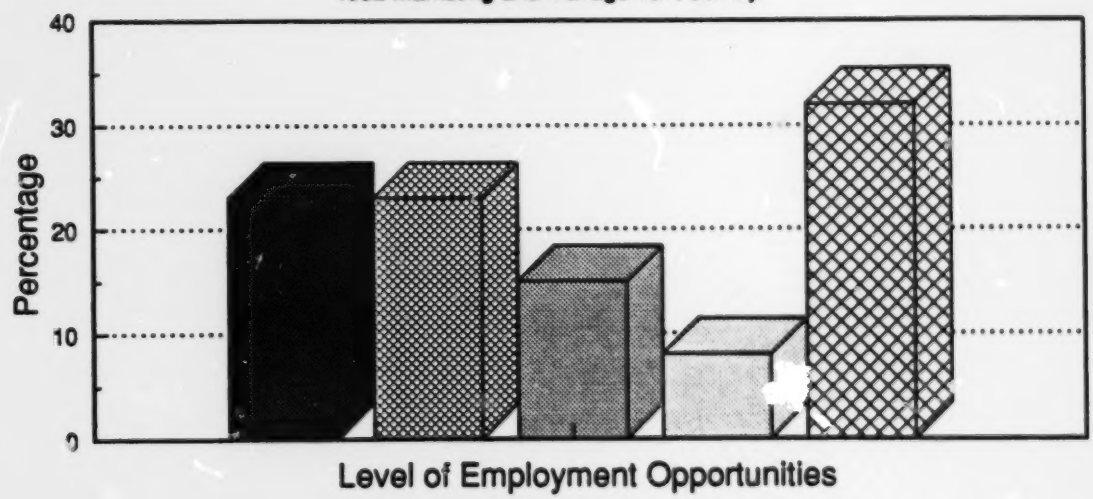


Statewide Percentage Response for Question 43,
Level of Employment Opportunities for
Real Estate (Total Responses = 120)

Chart 44

Insurance

1992 Marketing and Management Survey



Statewide Percentage Response for Question 44
Level of Employment Opportunities for
Insurance (Total Responses = 114)

Table 2. Questions 45 - 66: Please indicate whether or not your employees will have need for additional education or training.
Responses are shown for each T.O.P.S. Code with actual numbers and percentages; percentages are shown in parentheses.

QUESTION NUMBER	T.O.P.S. CODE	TRAINING NEEDED	NO TRAINING NEEDED
45.	Tax Studies	103 (61)	65 (39)
46.	Banking and Finance	100 (58)	73 (42)
47.	Banking (Management)	73 (47)	82 (53)
48.	Investment and Securities	85 (53)	81 (47)
49.	Credit Management	87 (52)	80 (48)
50.	Cashiering or Bank Telling	58 (37)	97 (63)
51.	Business Management	122 (69)	56 (31)
52.	Small Business Management	92 (61)	60 (39)
53.	Hotel/Motel Management	61 (35)	115 (65)
54.	Marketing and Distribution	113 (66)	58 (34)
55.	Advertising	110 (63)	64 (37)
56.	Purchasing	91 (55)	74 (45)
57.	Apparel and Accessories	52 (33)	107 (67)
58.	Food (Wholesale and Retail)	51 (31)	112 (69)
59.	Merchandising (Including Sales)	103 (62)	64 (38)
60.	Transportation and Materials Moving	69 (42)	95 (58)
61.	International Trade	92 (56)	73 (44)
62.	Traffic Management	73 (37)	123 (63)
63.	Material Support	62 (43)	82 (57)
64.	Airline Ground Crew	44 (28)	115 (72)
65.	Real Estate	75 (52)	70 (48)
66.	Insurance	88 (53)	78 (47)

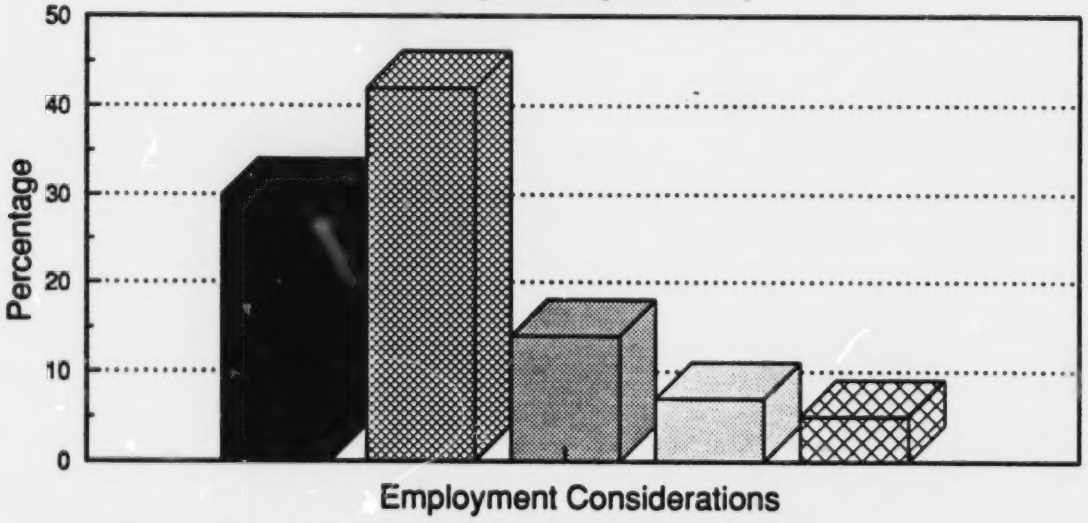
Chart 45. Questions 67 - 71: Please rank the following considerations, in order of importance when choosing a candidate for a job opening: Education, Prior Experience, General Appearance/Impression, Computer Literacy/Familiarity/Test Results.

Graphic responses are shown for the statewide percentages as each respondent chose the first or highest consideration. While prior experience is the largest representation, the community colleges can help significantly with the areas of education, computer literacy, and test results.

Chart 45

Primary Considerations for Employment

1992 Marketing and Management Survey



Statewide Percentage Responses to Questions 67 - 71

Chart 46. Question 72: How much does your company spend yearly for your location on training?

Graphic statewide percentage responses are shown for amounts noted. While the largest representation is for the smallest expenditure, there appears to be room for the community colleges to provide a service to the business community.

Chart 46

Annual Expenditures for Training

1992 Marketing and Management Survey

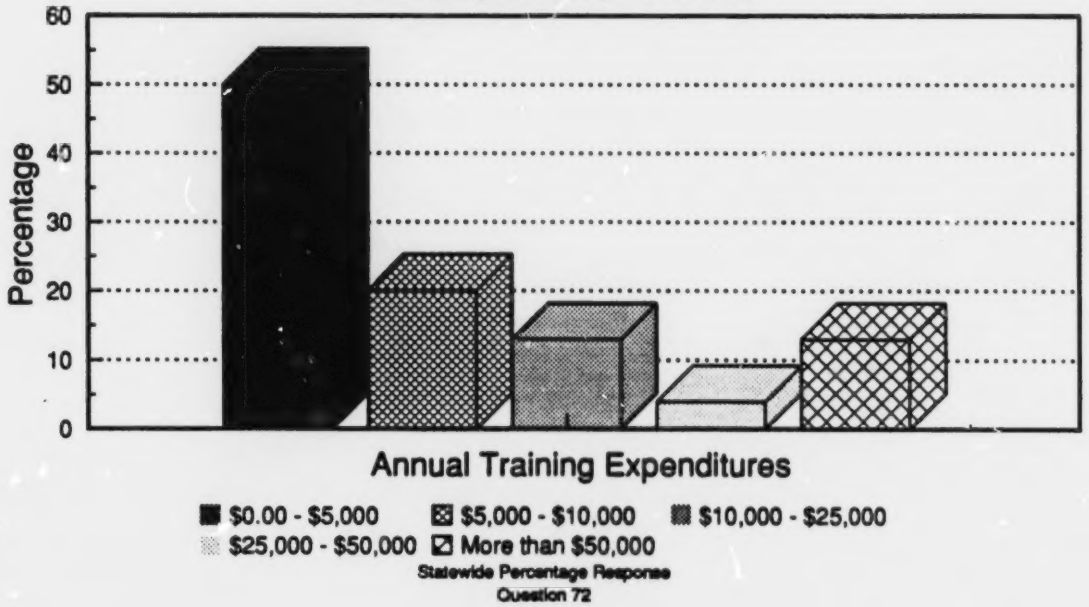


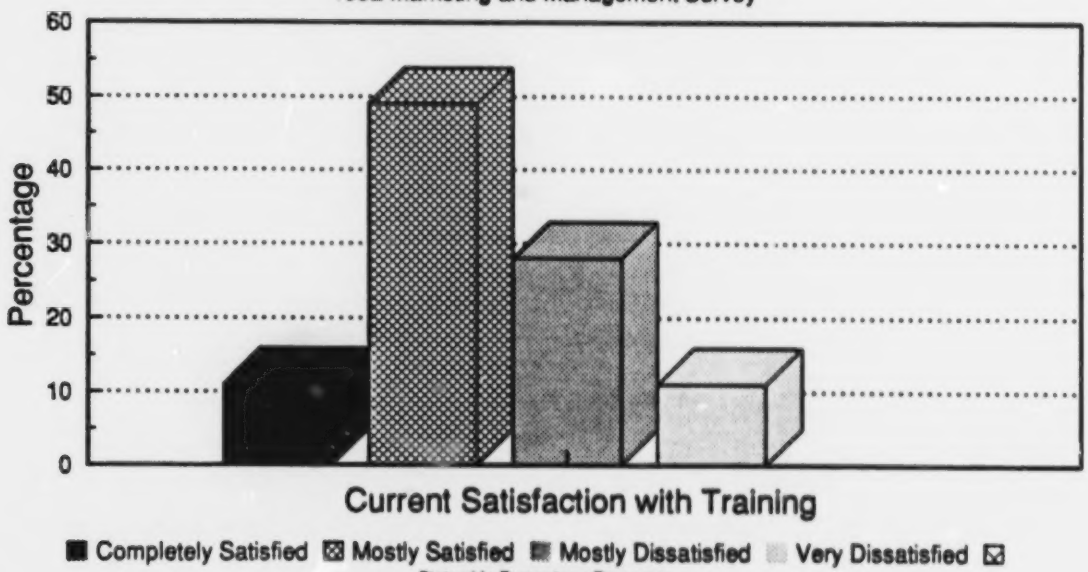
Chart 47. Question 73: Rate your satisfaction with current methods of training employees in business skills.

Graphic statewide percentage responses are noted for each option. There appears to be enough dissatisfaction noted that community colleges can provide a service.

Chart 47

Satisfaction with Current Training

1992 Marketing and Management Survey



Statewide Percentage Response

Question No. 73

Chart 48. Questions 74-76.

Question 74. Do you know that most community colleges offer customized training on a contract basis.
The predominant response to this question was "no." This provides an opportunity for community colleges to educate their public.

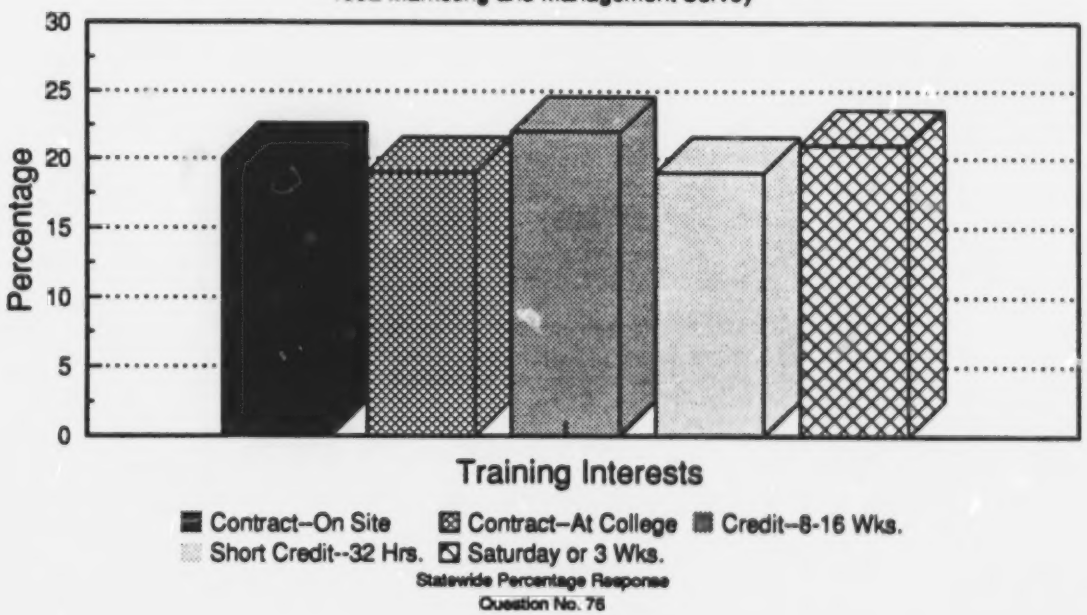
Question 75. Would your company be interested in having your local community college offer classes for your employees?
Forty-six percent of the respondents were interested in this training.

Question 76. If you answered Yes to Question 75, please indicate all options above in which your company would be interested.
An approximately equal interest in all options were shown.

Chart 48

Training Interests with Community Colleges

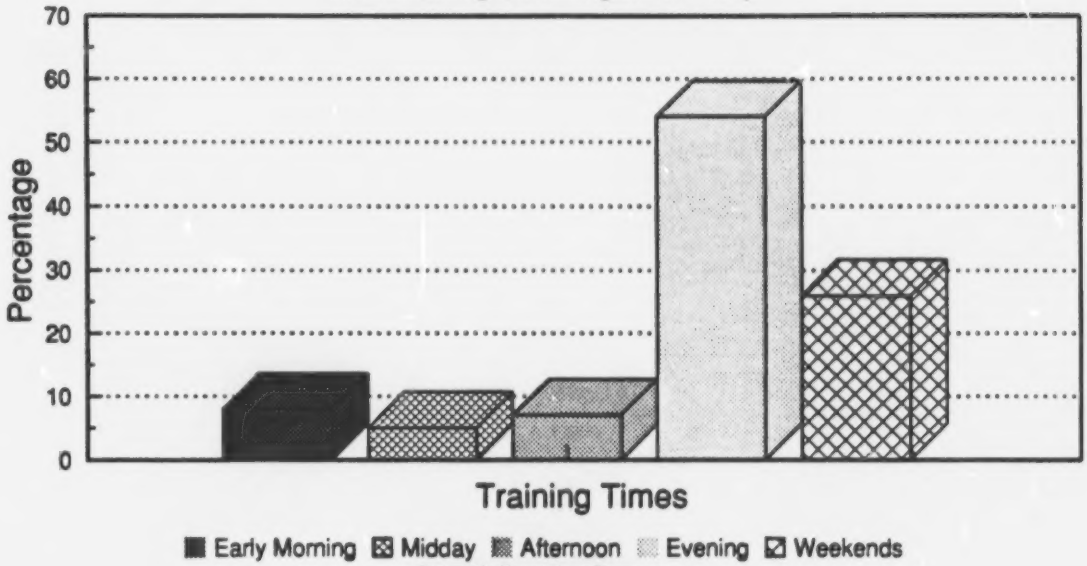
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 76

Chart 49. Question 77. At what times of the day would you like to see marketing and management classes offered at your local community college?
Evenings are the predominant request with weekends providing a strong second choice.

Chart 49
Preferred Training Times
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 77

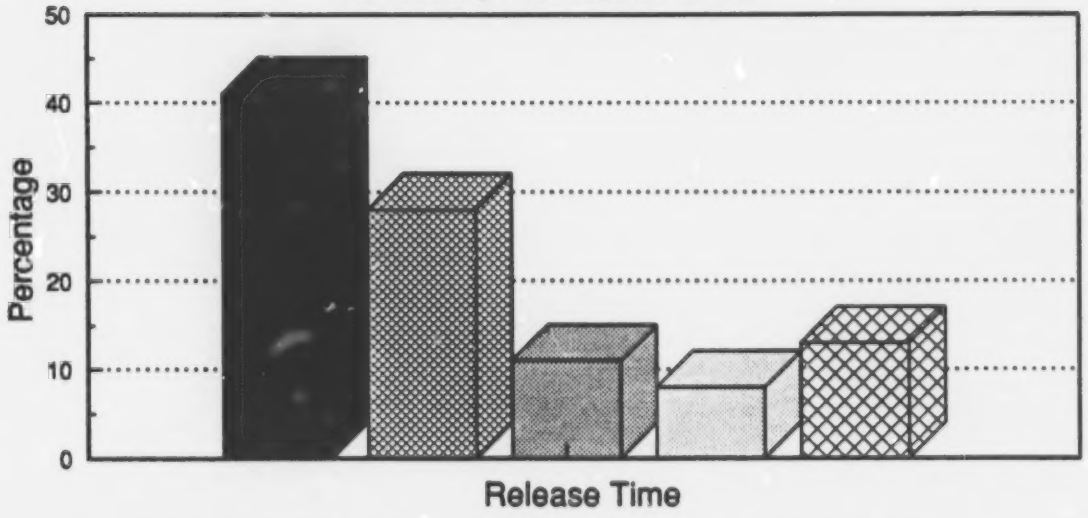
Chart 50. Question 78. Indicate the amount of release time offered for employee training monthly.

While "no" release time is the predominant response, the response is encouraging for community colleges to work with employee training during work hours.

Chart 50

Employee Release Time for Monthly Training

1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 78

Chart 51. Question 79. Does your company provide internships for students?
While "no" internships is the predominant response, developing internships for students in their curricular area may provide an opportunity to get "a foot in the door" in this difficult economic time.

Chart 51
Company-Provided Internships for Students
1992 Marketing and Management Survey

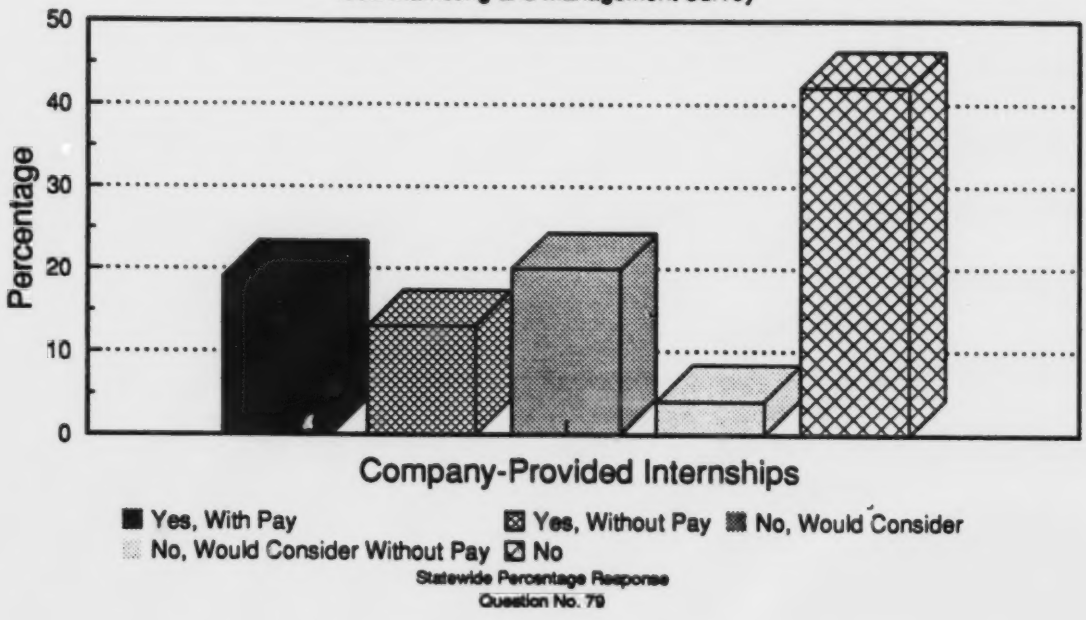


TABLE 3. Question 80. Would you be interested in serving on an advisory committee to contribute to development of business education in the California community colleges?

Of the 228 respondents, 123 or 54% stated a willingness to serve on an advisory committee. Unfortunately, many of this number answered the survey anonymously. However, the following 43 people in 13 counties listed by county stated a willingness to serve:

COUNTY	NAME AND ADDRESS
Alameda	Joseph Deakin Customer Service Representative 4940 Johnson Drive Pleasanton, CA 94588 John Ferris, PC Coordinator 6400 Sierra Court Dublin, CA 94568 Gene Geannamore Computer Support Specialist 1862 Spruce Street Livermore, CA 94550
Butte	Dave Brower, VP/General Manager KPAY Radio 2654 Cramer Lane Chico, CA 95928
Contra Costa	Deirdre Kolar Pacific Bell Information Services 3401 Crow Canyon Road Lafayette, CA 94583 John Maniz Technical Support 2010 Crow Canyon Pl. San Ramon, CA 94583 Dominic A. Van Nes Product Designer/Analyst 2300 Clayton Road Suite 300 Pittsburg, CA 94520

Fresno	Larry Balakian, Owner 711 East Shaw Avenue Fresno, CA 93710 Jim Milam Quality Assurance Manager Pelco, Inc. Clovis, CA 93612 Jack McLaughlin, Owner CB Commercial Reas Estate Group, Inc. 1510 East Shaw Avenue Suite 103 Fresno, CA 93710-8055 (209)228-3540 Doreen A. Rhodes Human Resources P. O. Box 146 Reedley, CA 93654

Los Angeles	Toiro Aijo, President 1024 Gardenia Avenue Long Beach, CA 90813 Candy A. Dowler Director, Product Management 2951 28th Street Suite 1000 Santa Monica, CA 90405 Robert Fucosi Sr. EDP Auditor Northrup's B-2 8900 E. Washington Blvd. Pico Rivera, CA 90066 Don Koch, President 2001 W. 16th Street Long Beach, CA 90813 David A. Jones, Owner P & D Plumbing Company 270 W. Linden Avenue Burbank, CA 91502 Adrienne Lee 11100 Santa Monica Blvd. No. 1850 Los Angeles, CA 90025 Geoffrey Pomeroy Marketing Manager 14651 Ventura Blvd. Sherman Oaks, CA 91403 Carl Valladares, Owner Real Estate and Insurance 21048 Devenshire Street S-103 Chatsworth, CA 91311 Lori Wolf Vocational Rehabilitation 3325 Wilshire Blvd., No. 1210 Los Angeles, CA 90010

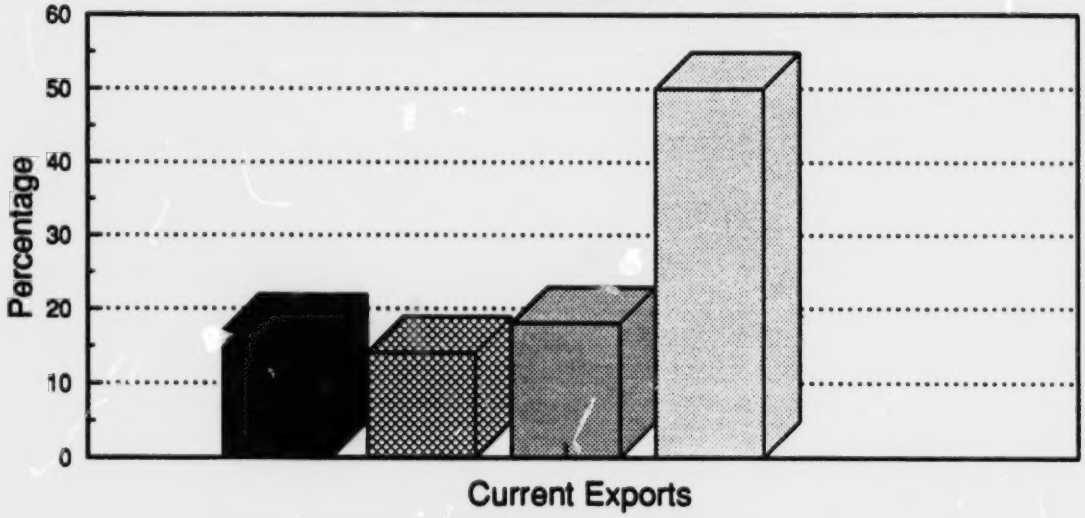
Orange	CEO North American Indian Trading Company P. O. Box 457 Cypress, CA 90630 Theresa Cinocco Sr. Travel Consultant 4 Centerpointe La Palma, CA 90623 Corrine Lawson 100 S. Fairmont Anaheim, CA 92808 Gita Patel, President 2512 Chambers Road Suite 107 Tustin, CA 92680 Michael R. Raven, President P. O. Box 59 Sunset Beach, CA 90742 Gabriel B. Zavola 1402 Arizona Drive Anaheim, CA 92805

Sacramento	Steven T. Bickel, Owner 9511 Jeffcott Road Wilton, CA 95693 John Bobo, Branch Manager P. O. Box 269037 Sacramento, CA 95827 Craig Corbin, Manager 10427 Folsom Blvd. Sacramento, CA 95670 Paula Lee, Business Manager 8801 Folsom Blvd., #145 Sacramento, CA 95826 Jon Slama, Manager Bradshaw & Old Placerville Sacramento, CA 95682
San Diego	Michael Collins, President Solar Electric, Incorporation 1450 Harbor Island Drive San Diego, CA 92101
San Mateo	Afshin Barkhorda Production Manager 1501-A El Camino Real Belmont, CA 94402 Larry Quinn VP, Employees Benefit Services PSW Benefit Resources 840 Hinckley Road, #249 Burlingame, CA 94010 Ciaren Reen Sales Manager 821 Industrial Road San Carlos, CA 94555

Santa Clara	Harry Grover, Owner Minutemen Press of Campbell 2910 South Bascom Avenue San Jose, CA 95124 Allen Nencescue, Owner, Broker 1266 Lincoln Avenue, #108 San Jose, CA 95125
Shasta	Carole Fossett Human Resources Representative P. O. Box 492478 Redding, CA 96049 Beth Picard Business Manager 2145 Court Street Redding, CA 96001 Mark Poeschl Assistant Manager 943 Mission De Oro Drive Redding, CA 96003 Rodney S. Wilson Assistant Office Manager 2295 Hilltop Drive Redding, CA 96002
Solano	Valerie Thomas, President Concise Advisory Associates 1208 Chula Vista Way Suisun, CA 94585
Tulare	Michel Budowski, President 518 W. Court Street Suite "C" Visalia, CA 93291

Chart 52. Question 81. In the international marketplace, are you currently exporting?
While no exports are the predominant response, a beginning is demonstrated in the various areas of exports.

Chart 52
Current Exports
1992 Marketing and Management Survey



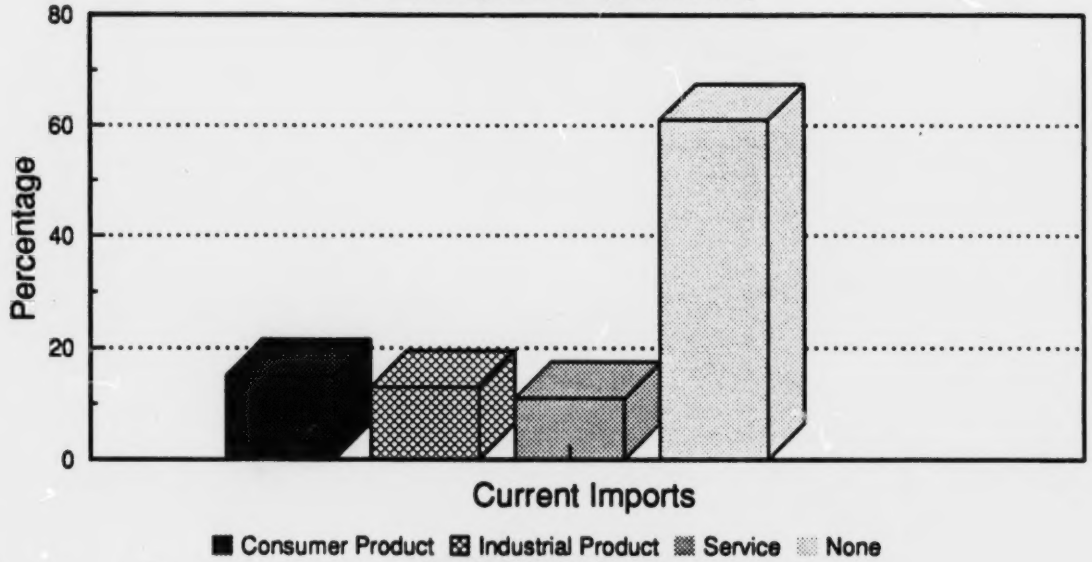
Statewide Percentage Response
Question No. 81

Chart 53. Question 82. In the international marketplace, are you currently importing? *While no imports are the predominant response, there are imports of the various types demonstrated.*

Chart 53

Current Imports

1992 Marketing and Management Survey

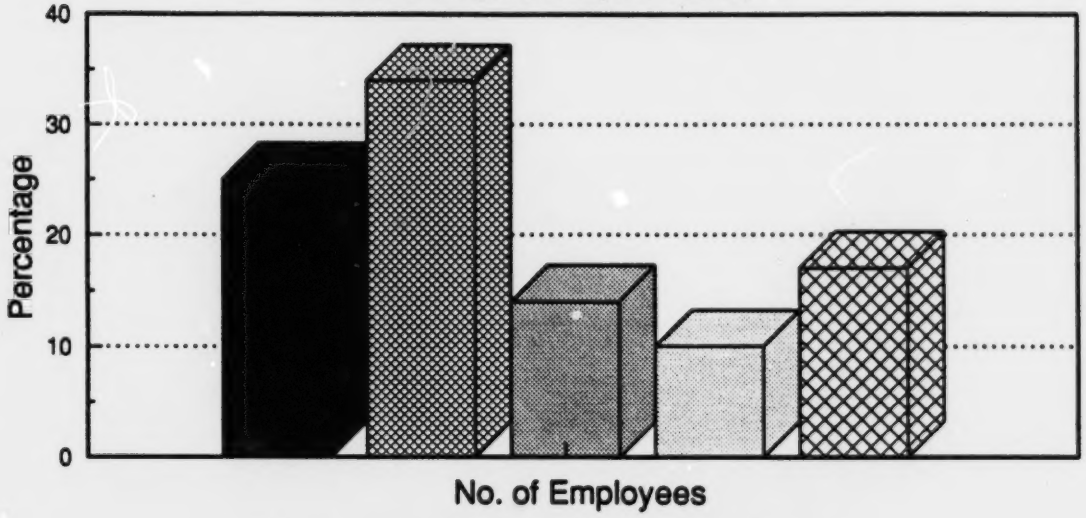


Statewide Percentage Response

Question No. 82

Chart 54. Question 83. How many employees does your company currently have working in the area of international trade?
Organizations with the smallest number of employees working in international trade predominates.

Chart 54
No. of Employees Working In International Trade
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 83

Chart 55. Question 84. The employees referred to in Question 83. perform work that falls within which of the areas of international business.
The predominant responses are Import and Export as well as Marketing.

Chart 55

Areas of International Business

1992 Marketing and Management Survey

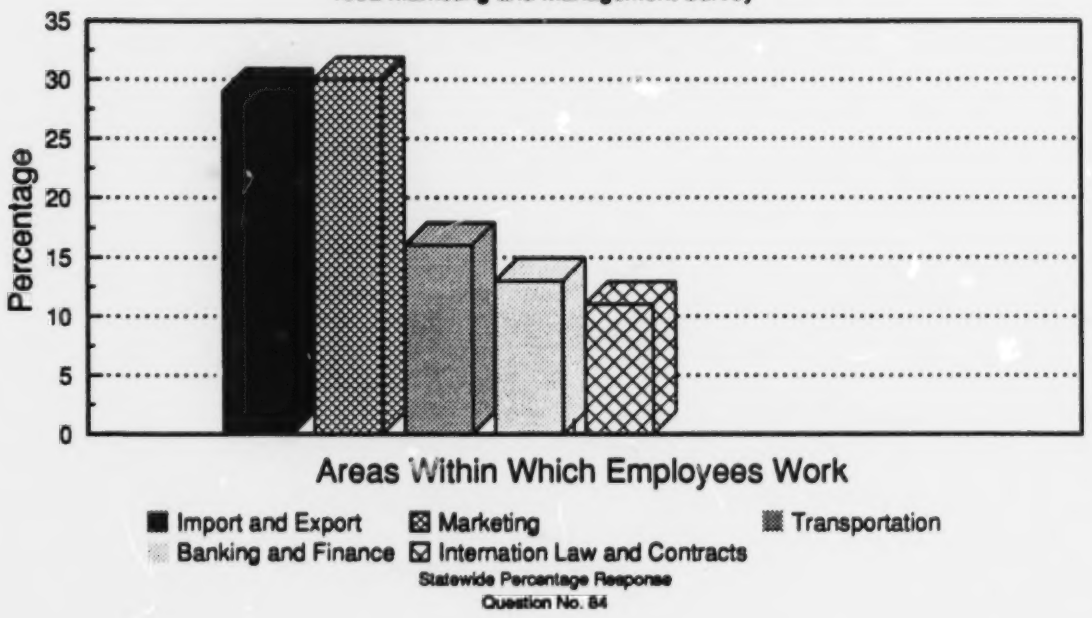
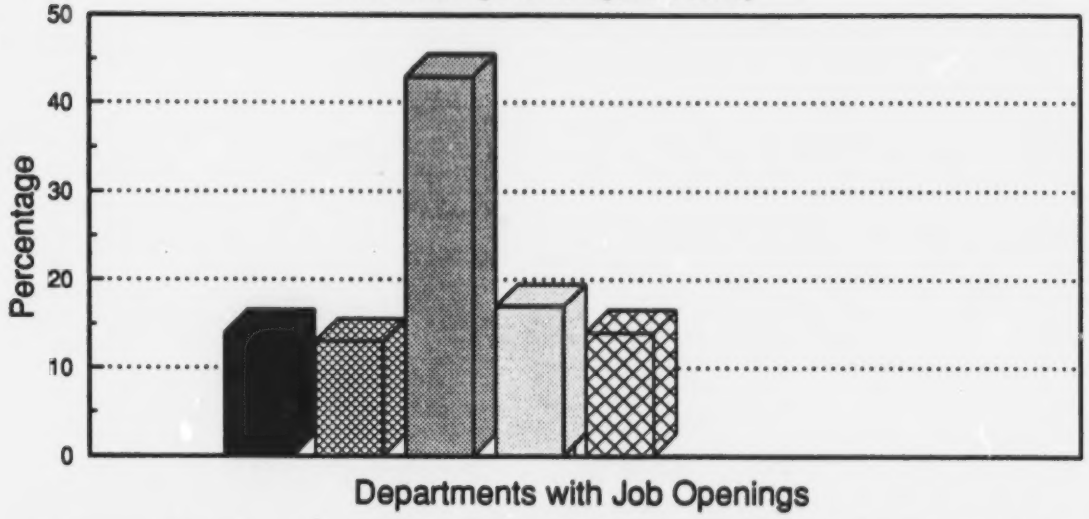


Chart 56. Question 85. Which department in your company accounts for most of the job openings in the area of international trade?
Marketing and sales are the predominant responses.

Chart 56
Job Openings in International Trade
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 85

Chart 57. Question 86. How often are outside consultants or contractors used to fill your needs for international business expertise?
Consultants and contractors do not appear to be frequently used.

Chart 57
Use of Outside Consultants
1992 Marketing and Management Survey

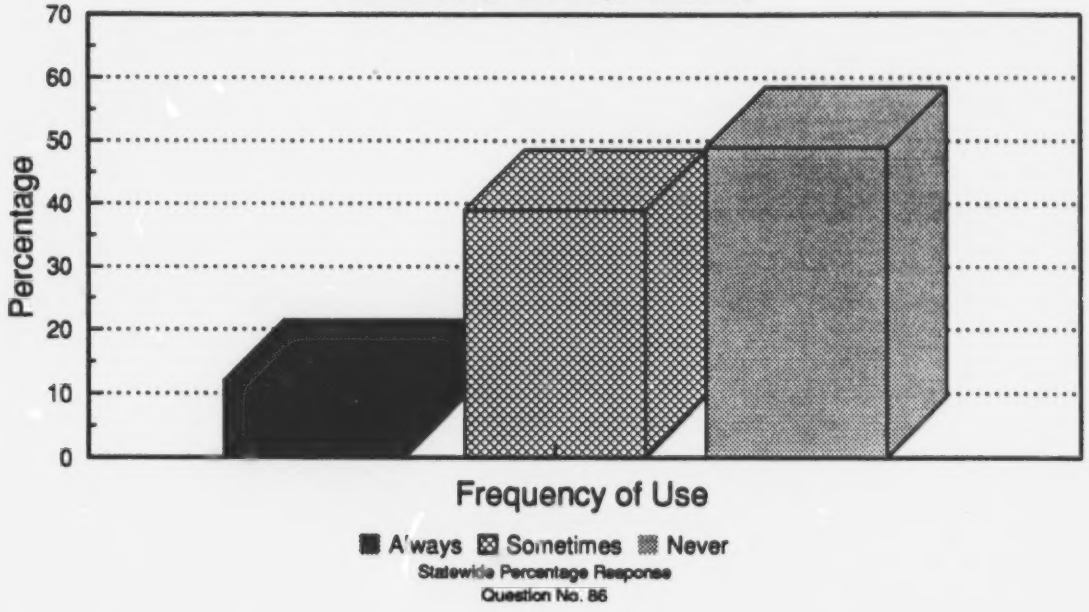
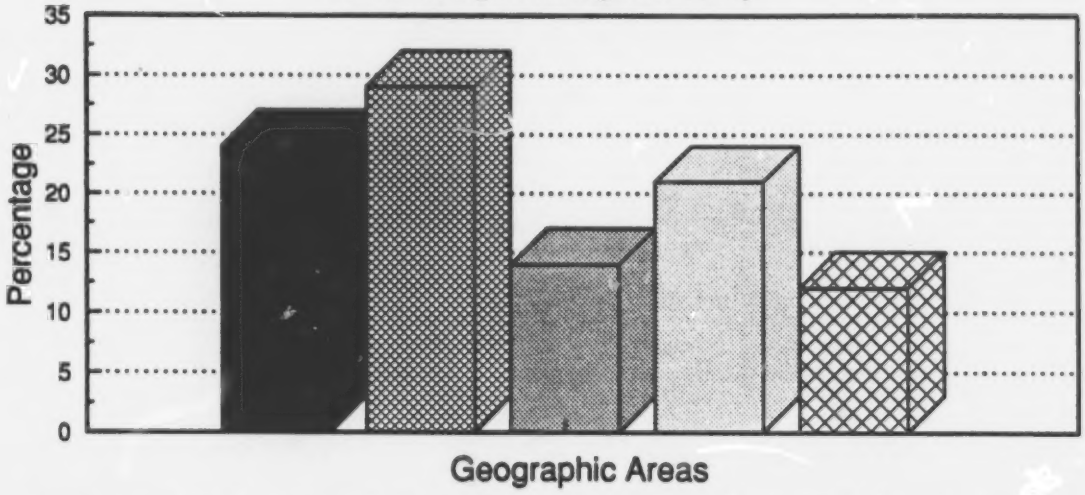


Chart 58. Question 87. Which geographic areas are of most interest to your company?
The European Economic Community followed by Mexico, Central and South America are the largest responses.

Chart 58

Geographic Areas of Interest to Companies

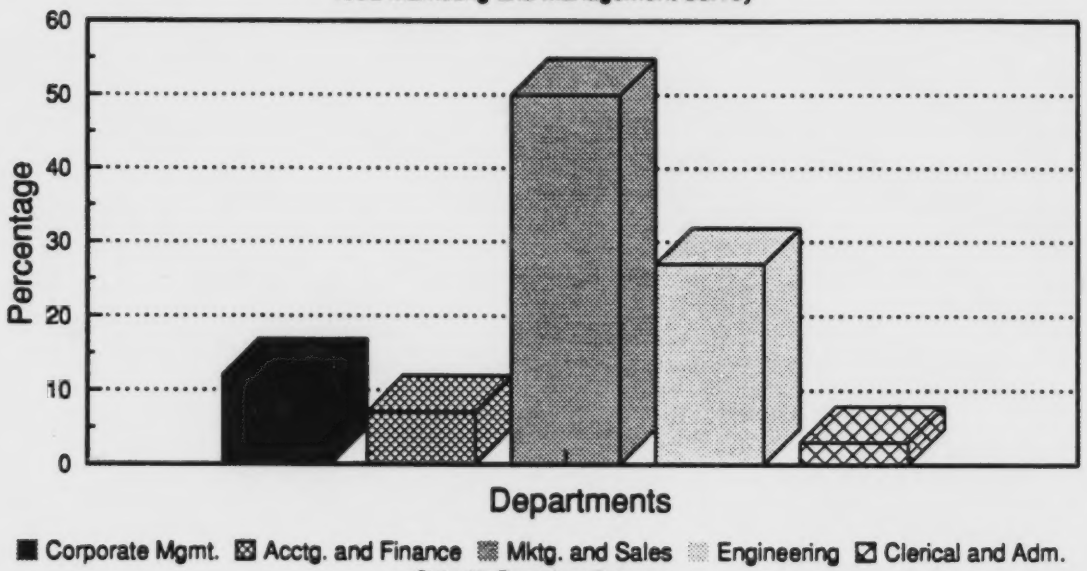
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 87

Chart 59. Question 88. During the next two years, in what area do you anticipate the greatest number of international trade job opportunities?
Marketing and sales represents the predominant response.

Chart 59
International Trade Job Opportunities
1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 88

TABLE 4

JOB OPENINGS CURRENTLY OPEN IN INTERNATIONAL BUSINESS BY COUNTY

89. What job opportunities in your company do you currently have open in international business?

COUNTY	JOB TITLES
Alameda	Manufacturing
Contra Costa	Sales
Los Angeles	International Lawyers Logistics Support Manufacturing Coordinator Sales
Orange	Artist/Craftsman Environmental Energy Travel
Sacramento	Purchasing Sales
San Francisco	Engineer Finance
San Mateo	Production Manager Sales
Santa Clara	Device Licenses Manager
Shasta	Environmental Scientists

TABLE 5

JOB OPENINGS FORECAST OVER THE NEXT TWO YEARS IN INTERNATIONAL BUSINESS BY COUNTY

90. What job opportunities in your company do you expect to have open in international business during the next two years?

COUNTY	JOB TITLES
Alameda	Manufacturing Marketing/Sales
Contra Costa	Marketing/Sales Refinery Opertors Technical Support
Fresno	Marketing/Sales
Los Angeles	Clerical Finance--Program Managers, Curators, Conservators Logistics Support Manufacturing Coordinator
Orange	Communications Field Engineer Communications System Engineer Environmental Energy International Marketing Shipping Telemarketing Travel
Sacramento	Food Insurance--Sales, Surveying, Adjusting Marketing/Sales
San Diego	International Marketing Representative Technical Sales
San Francisco	Engineers
Santa Cruz	International Shippers Sales Representatives
Shasta	Travel Agents
Tulare	Area Importing Marketing Manager

TABLE 6

SKILL CATEGORIES RANKED IN ORDER OF IMPORTANCE

91. Please rank the following skill categories in order of importance as they relate to performance of the job in the marketing sector.

SKILL LISTED IN ORDER OF RANK	PERCENTAGE OF RANKING	NUMBER OF RESPONSES
Verbal Skills	33	52
Interpersonal Skills	18	28
Computer Skills	12	18
Broad Conceptual Skills	9	15
Organizational Skills	8	13
Leadership Skills	6	10
Mechanical Skills	4	7
Math Skills	3	5
Research Skills	1	2

TABLE 7

TRAINING COMMONLY OFFERED INHOUSE TO EMPLOYEES

92. Please list training offered inhouse to your employees.

Computer Applications	Computerized Accounting	Finance and Accounting
Marketing Skills	Organizational Skills	Sales Skills
Supervisory/Management Skills	Technical Product Knowledge	Time Management
Total Quality Management	Writing Skills	

TABLE 8

SPECIAL WORKPLACE TRAINING OR EDUCATIONAL NEEDS

93. What special workplace training or education needs does your company have?

The following are issues reported in alphabetical order.

Accounting	Artificial Intelligence Software Design	C Programming Language
Computer Applications	Computer Graphics	Conceptual Design
Confidence Building	Corporate Infrastructure	Cross Cultural Awareness
Domestic Distribution Setup	Foreign Languages	International Business
Interpersonal Skills	Listening Skills	Marketing and Sales
Proposal Planning	Public Speaking	Purchasing
Safety	Supervision and Management	Total Quality Management

TABLE 9

COMMENTS

94. Any comments to help us in our endeavors would be greatly appreciated.

Insurance contracts, Real Estate Board Classes, Entrepreneurship, Small Business Opportunities are needed.

As I see it, the manufacturer is out of favor in place of the so-called glamour fields, ie.e. finance, management, etc. In order to stem the outflow of manufacturing jobs from the state, the state's leadership must support manufacturing. Japan didn't get to where they are by providing white collar services, but by producing tangible products that people want and need. We need workers with skills for the 90s and the 21st century.

Because of the loss of jobs/positions in California, students must be aware that if they are competing for a job in business, they will need a four-year degree. Degreed people are having a hard time finding jobs and are settling for less. Foreign language and culture are important.

Realtors are not prepared adequately with the 14 week course required to become licensed. The legal, interpersonal, research skills are not covered adequately.

Students should be told to do your job, be honest, good grooming, dress business-like, be on time, leave your personal problems at home.

I feel we need to place more emphasis on sciences and less on art. Our national product is affected by manufacturing and support services. The more goods we design, manufacture, and export, the stronger our economy will be.

The use of business leaders who deal in a particular field on a daily basis are important guest speakers. Their experiences and examples of actual transactions are great supplements to text books.

Do not underestimate the basics. Too many entry level employees exhibit poor English, grammar and mathematical skills. This results in decreased productivity and remedial training.

Dear Business Person:

Marketing and management educators in the California Community Colleges are responsible for and wish to teach relevant and current skills for employment. They are continually endeavoring to create new programs and update existing ones to prepare their students to work in your organizations. We would very much appreciate your help in providing these educators with information from your area of expertise regarding the skills you would like your future employees to have. The attached 1992 Marketing and Management Survey for Business and Industry is designed for this purpose as well as to help us learn more about the specific job opportunities that your company has or may have in the future.

Please note that a separate business survey is being done to ascertain the use of computers and office technology. We appreciate your willingness to help us with both if you are the recipient of both. These statewide surveys are sponsored and funded through the Chancellor's Office for California Community Colleges. Will you please complete and return this survey at your earliest convenience? The data will be compiled and provided to educators for immediate review and action.

Thank you for taking the time to give us this valuable information. You are contributing to a strong business/education partnership in your community. The results of this survey will be interpreted in relation to business size, location, and SIC code and shared with the business educators at the community colleges in your geographic region as well as statewide. If you would like a copy of the final report which will be distributed to business educators, please include a self-addressed and stamped envelope with your returned survey.

Sincerely,

Carole Jarrett
Project Director
Solano Community College

1992 Marketing and Management Survey for Business and Industry

Name: _____

Job Title: _____

Company Address: _____

City: _____ County: _____ Zip: _____

No. of Employees: _____ SIC Code or Description of Main Business Activity: _____

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This survey has been designed to help marketing and management teachers to update curriculum and create new curriculum, where necessary, for the following areas. Please circle the area which is closest to the main business activity of your organization.

1. Tax Studies
2. Banking and Finance
3. Banking (Management)
4. Investment and Securities
5. Credit Management
6. Cashiering or Bank Telling
7. Business Management
8. Small Business Management
9. Hotel/Motel Management
10. Marketing and Distribution
11. Advertising
12. Purchasing
13. Apparel and Accessories
14. Food (Wholesale and Retail)
15. Merchandising (Including sales)
16. Transportation and Materials Moving
17. International Trade
18. Traffic Management
19. Material Support
20. Airline Ground Crew
21. Real Estate
22. Insurance

Please list what you think are the five most important issues to be taught for employment in the area you circled above. (For example, if you are in international trade, you might answer:)

1. International marketing
2. Foreign languages
3. Cross cultural awareness
4. Organizational skills
5. International finance

Write your answer on the following lines.

1. _____
2. _____
3. _____
4. _____
5. _____

For Questions 1 through 88, circle the appropriate response.

For questions 1 through 22, please indicate for each of the following industry areas the level of job opportunities which can be expected over the next two years. Use the following scale to mark your answer.

a No demand/No job opportunities
b Low demand/Occasional job opportunities
c Moderate demand/Some job opportunities
d Strong demand/Many job opportunities
e Very high demand/Cannot find enough people with appropriate experience or education

a b c d e 1. Tax Studies
a b c d e 2. Banking and Finance
a b c d e 3. Banking (Management)
a b c d e 4. Investment and Securities
a b c d e 5. Credit Management
a b c d e 6. Cashiering or Bank Telling
a b c d e 7. Business Management
a b c d e 8. Small Business Management
a b c d e 9. Hotel/Motel Management
a b c d e 10. Marketing and Distribution
a b c d e 11. Advertising
a b c d e 12. Purchasing
a b c d e 13. Apparel and Accessories
a b c d e 14. Food (Wholesale and Retail)
a b c d e 15. Merchandising (Including sales)
a b c d e 16. Transportation and Materials Moving
a b c d e 17. International Trade
a b c d e 18. Traffic Management
a b c d e 19. Material Support
a b c d e 20. Airline Ground Crew
a b c d e 21. Real Estate
a b c d e 22. Insurance

For questions 23 through 44 please indicate the level of employment at which job opportunities occur for an applicant with education in each of the 22 areas listed in the question above. (For example, Question 23 asks for the level of job opportunities for Tax Studies, Question 24 for the level of Banking and Finance, and so on.)

a Entry level opportunities
b Supervisory level opportunities
c Middle managment opportunities
d Upper management opportunities
e No job opportunities in this area at our company

For questions 45 through 66 below, please indicate whether or not your employees will have need for additional education or training. (For example, Question 45 asks whether or not employees involved in Tax Studies work will need additional training. Question 46 asks about the need for additional training in Banking and Finance, and so on.)

a Need additional training
b Will not need additional training

a b	45.	Tax Studies
a b	46.	Banking and Finance
a b	47.	Banking (Management)
a b	48.	Investment and Securities
a b	49.	Credit Management
a b	50.	Cashiering or Bank Telling
a b	51.	Business Management
a b	52.	Small Business Management
a b	53.	Hotel/Motel Management
a b	54.	Marketing and Distribution
a b	55.	Advertising
a b	56.	Purchasing
a b	57.	Apparel and Accessories
a b	58.	Food (Wholesale and Retail)
a b	59.	Merchandising (Including sales)
a b	60.	Transportation and Materials Moving
a b	61.	International Trade
a b	62.	Traffic Management
a b	63.	Material Support
a b	64.	Airline Ground Crew
a b	65.	Real Estate
a b	66.	Insurance

*For questions 67 through 71, please rank the following considerations, in order of importance when choosing a candidate for a job opening. (For example, if Education in Question 67 is the first or highest consideration, mark **a**. If Prior Experience in Question 68 is lowest, mark **e**.)*

a First
b Second
c Third
d Fourth
e Fifth

a b c d e	67.	Education
a b c d e	68.	Prior experience
a b c d e	69.	General appearance/impression
a b c d e	70.	Computer literacy/familiarity
a b c d e	71.	Test results

72. How much does your company spend yearly for your location on training?
    a. $0.00 - $5,000
    b. $5,000 - $10,000
    c. $10,000 - $25,000
    d. $25,000 - $50,000
    e. More than $50,000

73. Rate your satisfaction with current methods of training employees in business skills:
    a. Completely satisfied
    b. Mostly satisfied
    c. Mostly dissatisfied
    d. Very dissatisfied

74. Do you know that most community colleges offer customized training on a contract basis?
    a. Yes
    b. No

75. Would your company be interested in having your local community college offer classes for your employees?
    a. Yes
    b. No

76. If you answered **Yes** to Question 75, please indicate all options above in which your company would be interested:
    a. By contract and on site at the company
    b. By contract at the community college
    c. Regular credit classes (8 to 16 weeks)
    d. Short credit classes (32 hours long)
    e. Saturday or 3-week classes

77. At what times of the day would you like to see marketing and management classes offered at your local community community college?
    a. Early morning
    b. Midday
    c. Afternoon
    d. Evening
    e. Weekends

78. Indicate the amount of release time offered for employee training monthly.
    a. No release time
    b. 1 - 5 hours
    c. 6 - 10 hours
    d. 11 - 15 hours
    e. 16 hours or more

79. Does your company provide internships for students?
    a. Yes with salary or stipend
    b. Yes without pay
    c.. Not at present, but would consider in the future
    d.. Not at present, but would consider without pay only in the future
    e. No

80. Would you be interested in serving on an advisory committee to contribute to development of business education in the California community colleges?
    a. Yes
    b. No

The next ten questions regard INTERNATIONAL business. Please see the following for definition of terms used for Questions 81 through 90.

DEFINITION OF INTERNATIONAL TRADE TERMS:

International Trade: *Sale or purchase of goods, services, or intellectual properties across international boundaries. Such business as licensing, technology transfer, and joint venture are also part of international trade.*

Export: *Sale of goods, services, or intellectual property to an individual, corporate entity, or government in another country.*

Import: *Purchase of goods, services, or intellectual property from an individual, corporate entity, or government in another country.*

For example, if your company manufactures or buys in any other country any product or component for sale in the U.S., you are an importer. If you ship products outside the U.S., you are an exporter. Similarly, if you are an accounting firm with offices outside the U.S. borders, you are an exporter.

81. In the international marketplace, are you currently exporting?
    a. A consumer product
    b. An industrial product
    c. A service
    d. No products or services

82. In the international marketplace, are you currently importing?
    a. A consumer product
    b. An industrial product
    c. A service
    d. No products or services

83. How many employees does your company currently have working in the area of international trade?
    a. Self only
    b. 2 - 10
    c. 11 - 100
    d. 101 - 500
    e. Over 500

84. Please circle all work performed in areas of international business that apply to the employees referred to in Question 83. *(Mark all that apply.)*
    a. Import and export
    b. Marketing
    c. Transportation
    d. Banking and finance
    e. International law and contracts
    f. Other _____

85. Which department in your company accounts for most of the job openings in the area of international trade?
    a. Corporate management
    b. Accounting and finance
    c. Marketing and sales
    d. Engineering
    e. Clerical and administrative
    f. Other _____

86. How often are outside consultants or contractors used to fill your needs for international business expertise?
    a. Always use
    b. Sometimes use
    c. Do not use

87. Which geographic areas are of most interest to your company? *(Check all that apply.)*
    a. Mexico, Central and South America
    b. European Economic Community
    c. Eastern Europe and Soviet Europe
    d. Asia
    e. Middle East and Africa

88. During the next two years, in what area do you anticipate the greatest number of international trade job opportunities?
    a. Corporate management
    b. Accounting and finance
    c. Marketing and sales
    d. Engineering
    e. Clerical and administrative

89. What job opportunities in your company do you currently have open in international business? *(List job titles or attach list.)*

90. What job opportunities in your company do you expect to have open in international business during the next two years? *(List job titles or attach list.)*

91. Please rank on this sheet the following skill categories in order of importance as they relate to performance of the jobs in the marketing sector. *To rank, write a number from 1 - 10 to the left of the scale category.*

_____ Math skills
_____ Verbal skills
_____ Computer skills
_____ Mechanical skills
_____ Interpersonal skills
_____ Organizational skills
_____ Leadership skills
_____ Broad conceptual skills
_____ Research skills
_____ Other _____

92. Please list training offered inhouse to your employees.

93. What special workplace training or education needs does your company have? *Please use the bottom of this page for any additional comments you wish to make.* ***Thank you very much for your time and effort in supplying us with this valuable information.***

94. Any comments to help us in our endeavors would be greatly appreciated.

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MAILING LOS ANGELES SOUTHERN SAN DIEGO NORTHERN CENTRAL BAY

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Please
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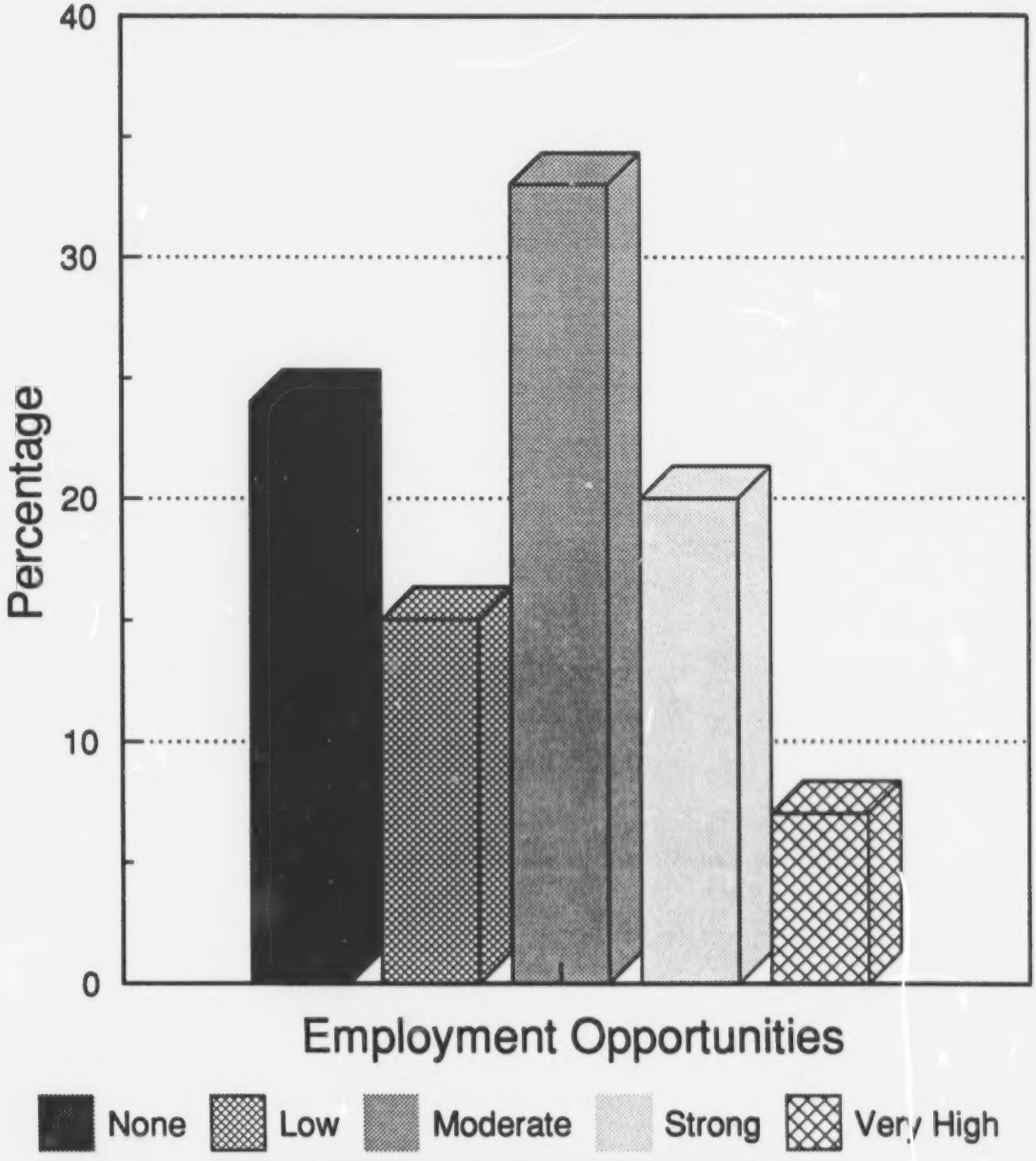
TO: L. JOYCE ARNTSON
IRVINE VALLEY COLLEGE
5500 IRVINE CENTER DRIVE
IRVINE, CA 92720

staple here

Chart 1
Tax Studies
1992 Marketing and Management Survey

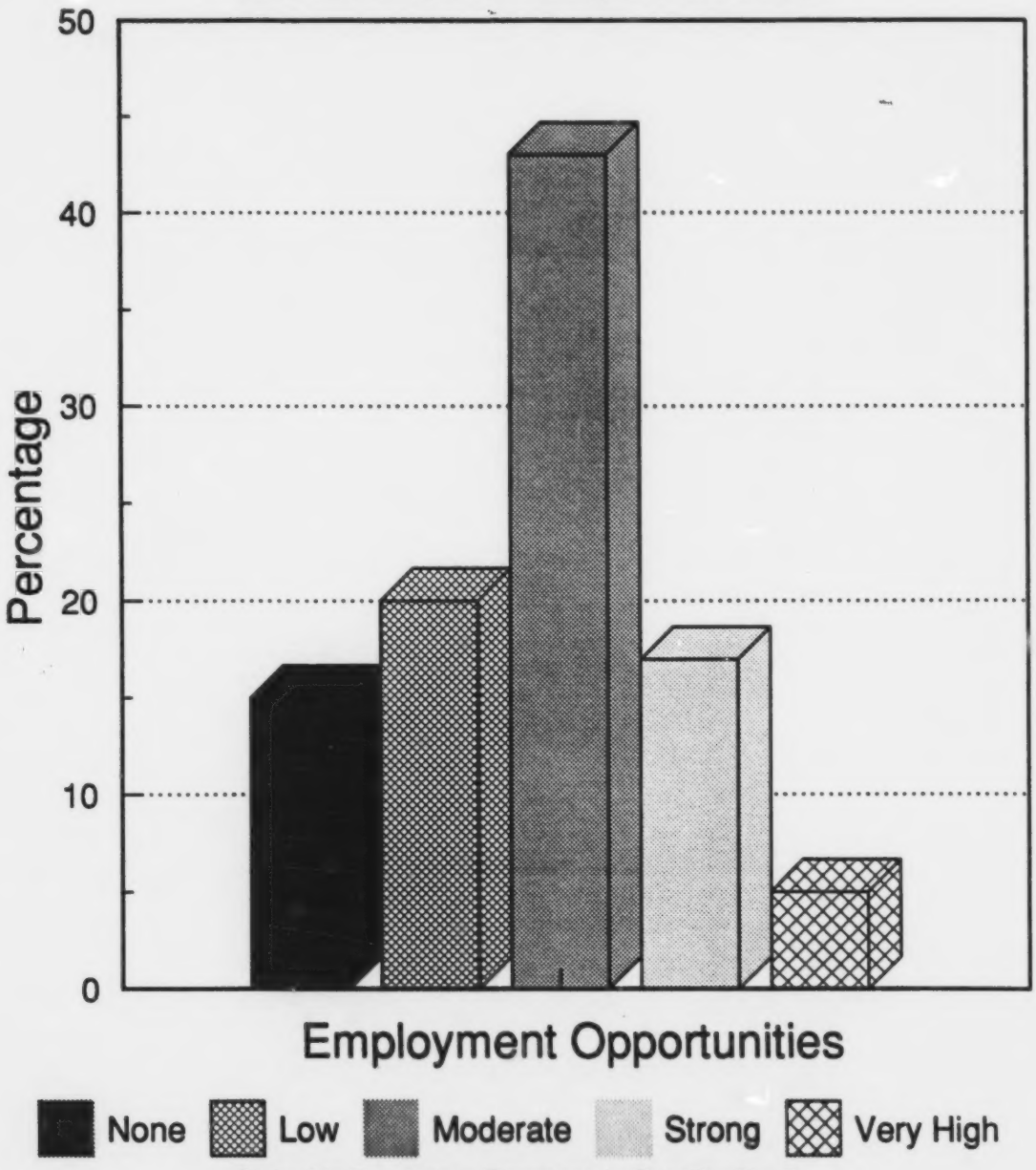


Statewide Percentage Response to Question No. 1, Employment Opportunities Expected Over Next Two Years for Tax Studies (Total Responses = 194).

Chart 2

Banking and Finance

1992 Marketing and Management Survey

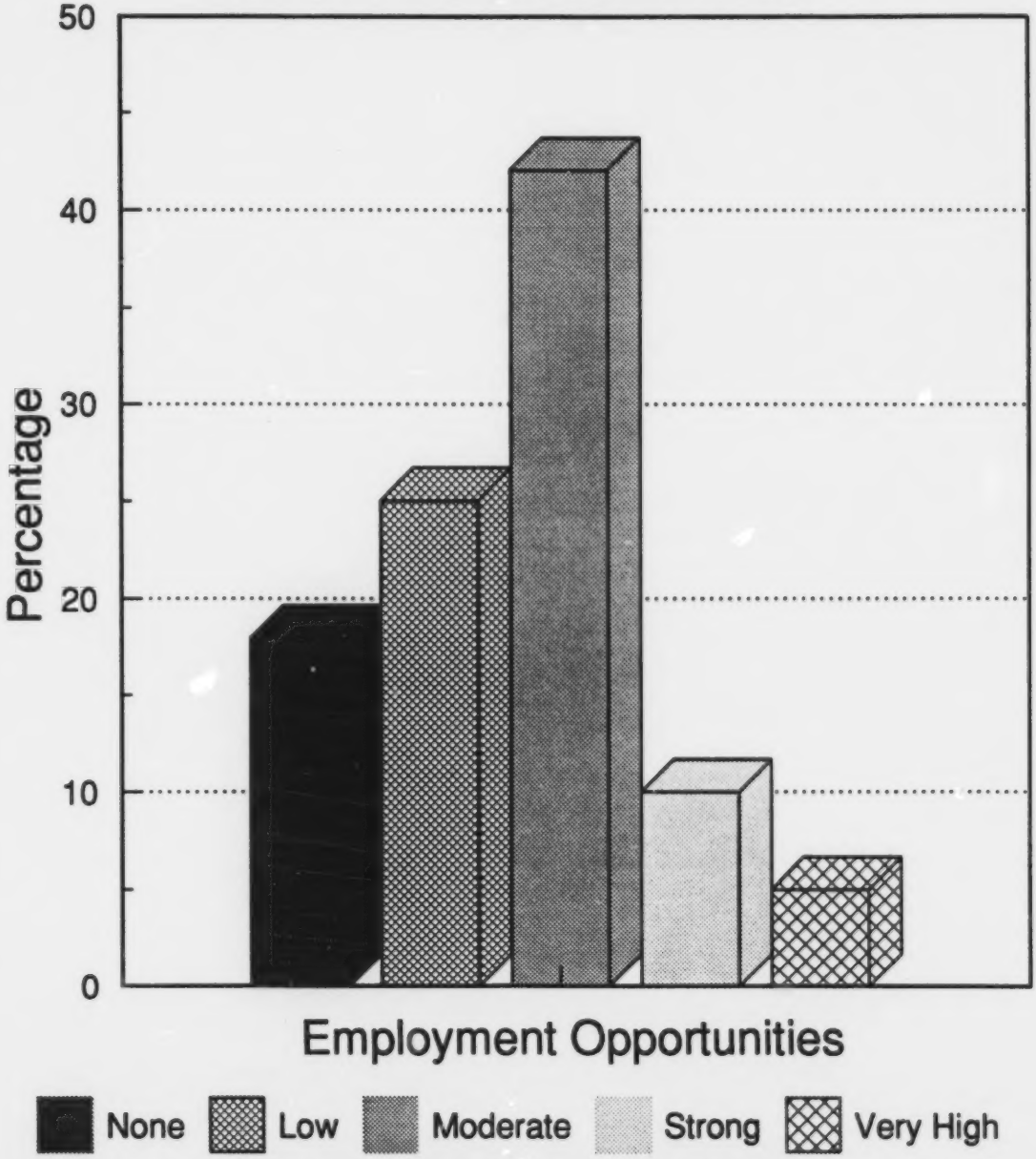


Statewide Percentage Response to Question No. 2, Employment Opportunities Next Two Years for Banking and Finance (Total Responses = 195).

Chart 3

Banking (Management)

1992 Marketing and Management Survey

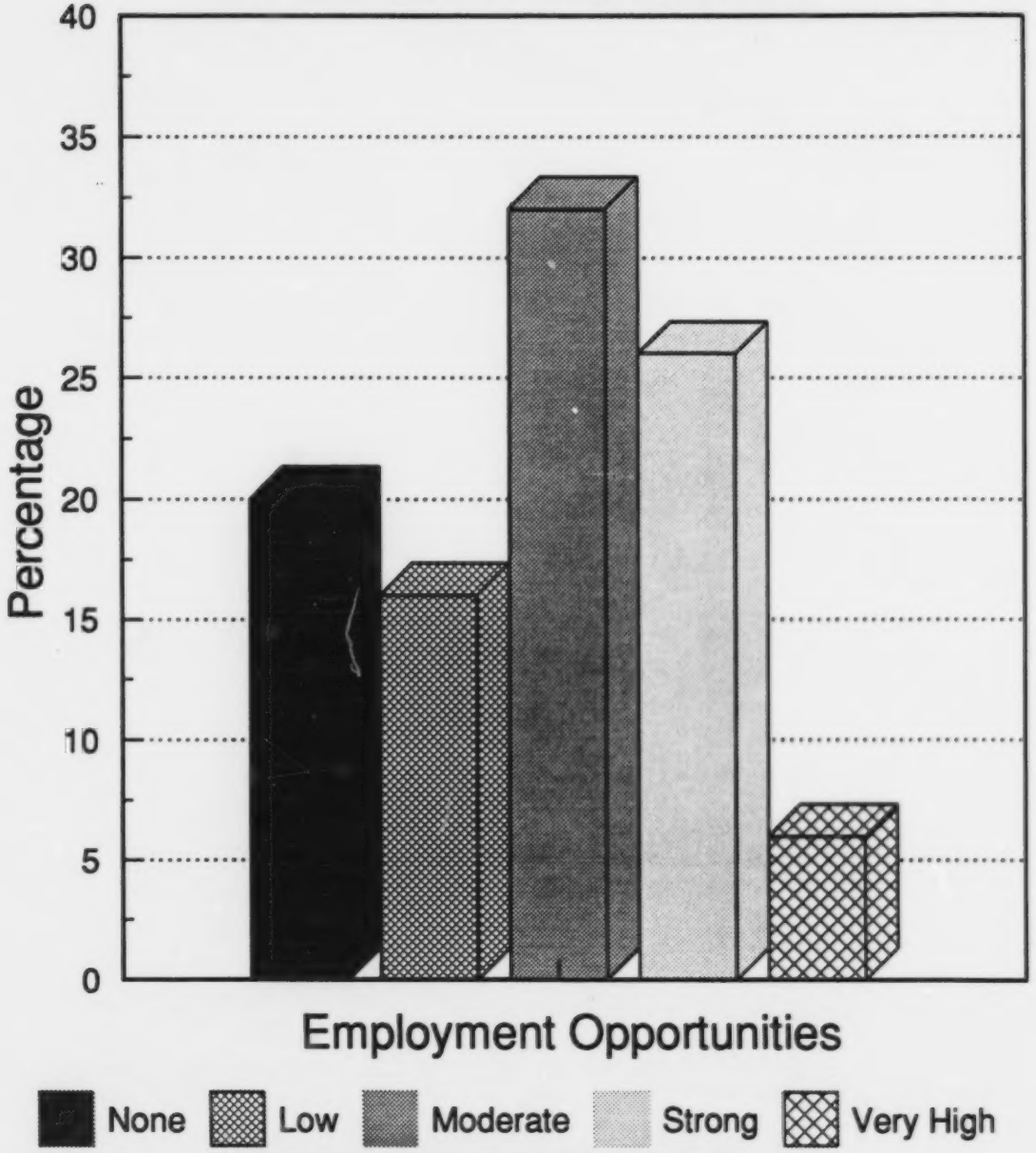


Statewide Percentage Response to Question No. 3, Employment Opportunities Next Two Years for Banking (Management) (Total Responses - 188).

Chart 4

Investment and Securities

1992 Marketing and Management Survey

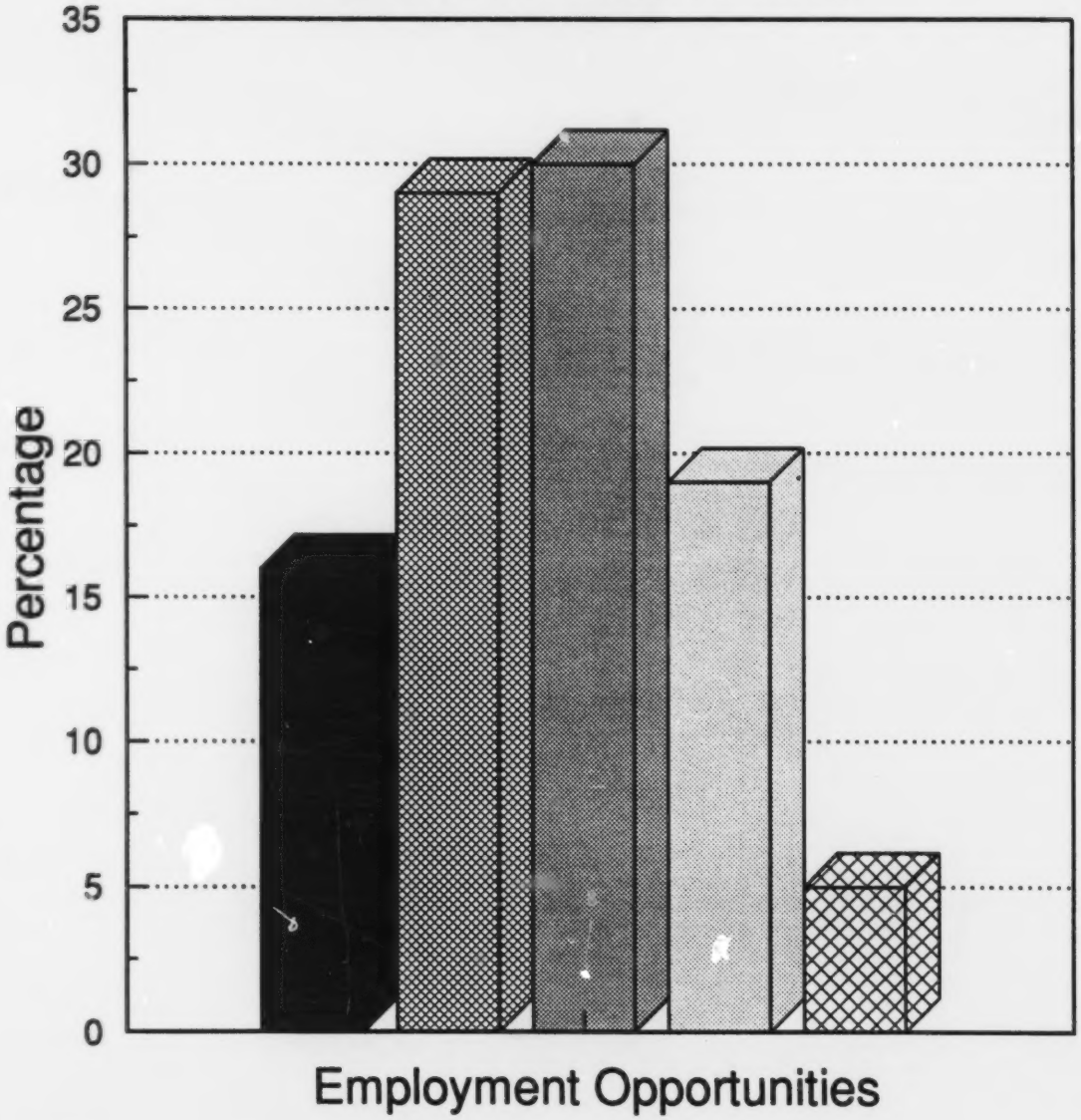


Statewide Percentage Response to Question No. 4, Employment Opportunities Next Two Years for Investment and Securities (Responses = 188).

Chart 5

Credit Management

1992 Marketing and Management Survey

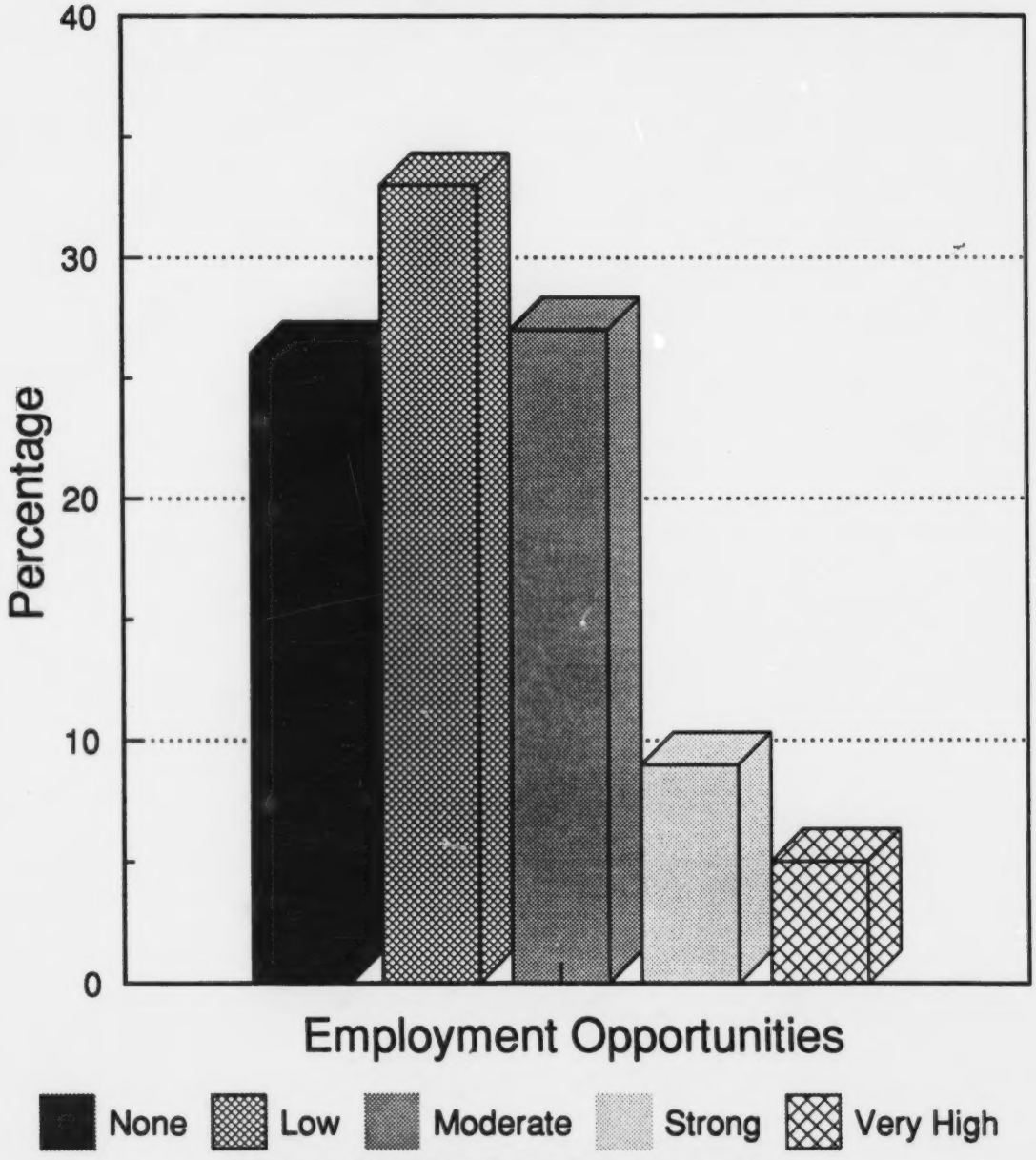


Statewide Percentage Response to Question No. 5, Employment Opportunities Next Two Years for Credit Management (Total Responses = 190).

Chart 6

Cashiering or Bank Telling

1992 Marketing and Management Survey

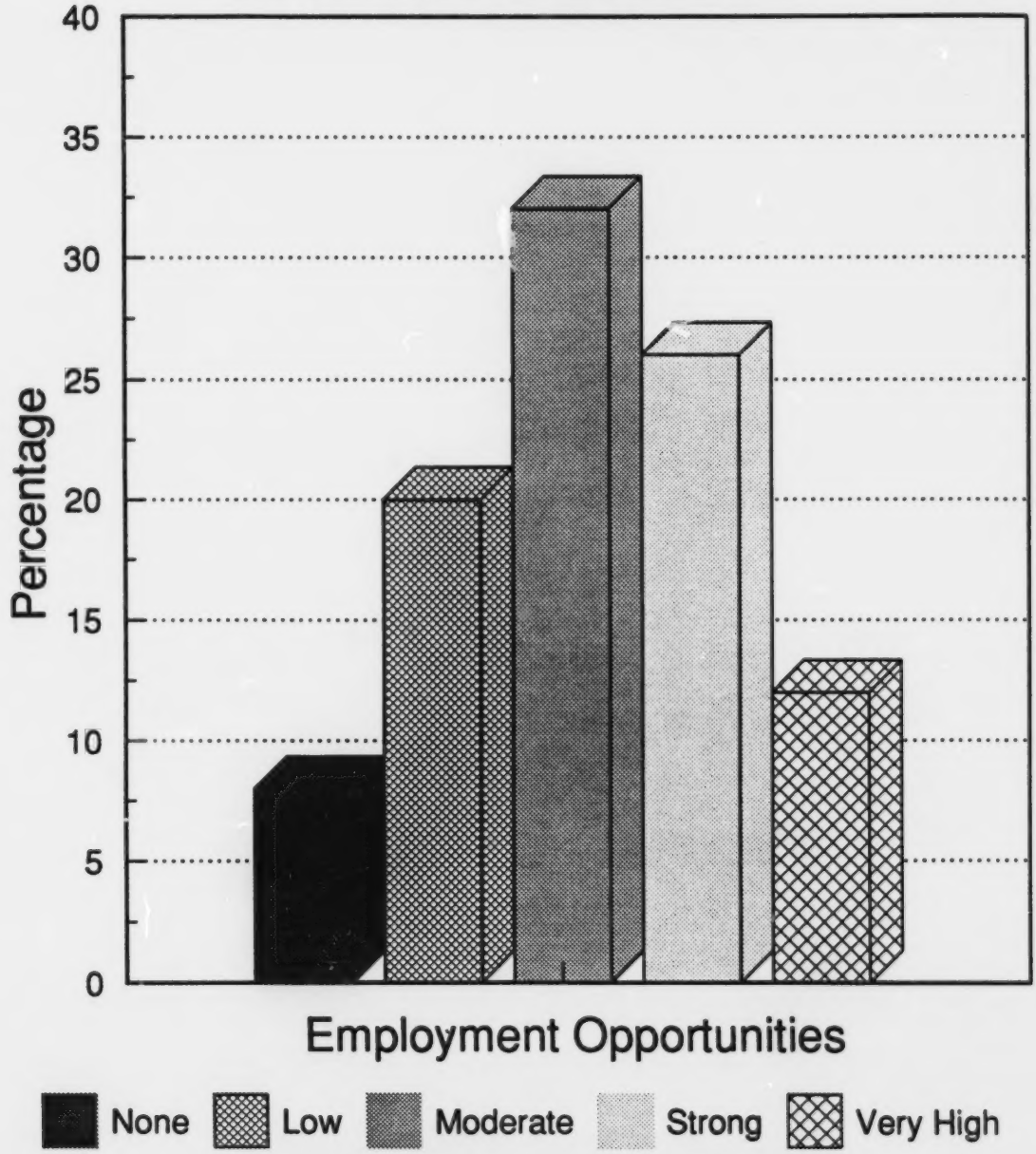


Statewide Percentage Response to Question No. 6,
Employment Opportunities Next Two Years for
Cashiering or Bank Telling (Responses = 187)

Chart 7

Business Management

1992 Marketing and Management Survey

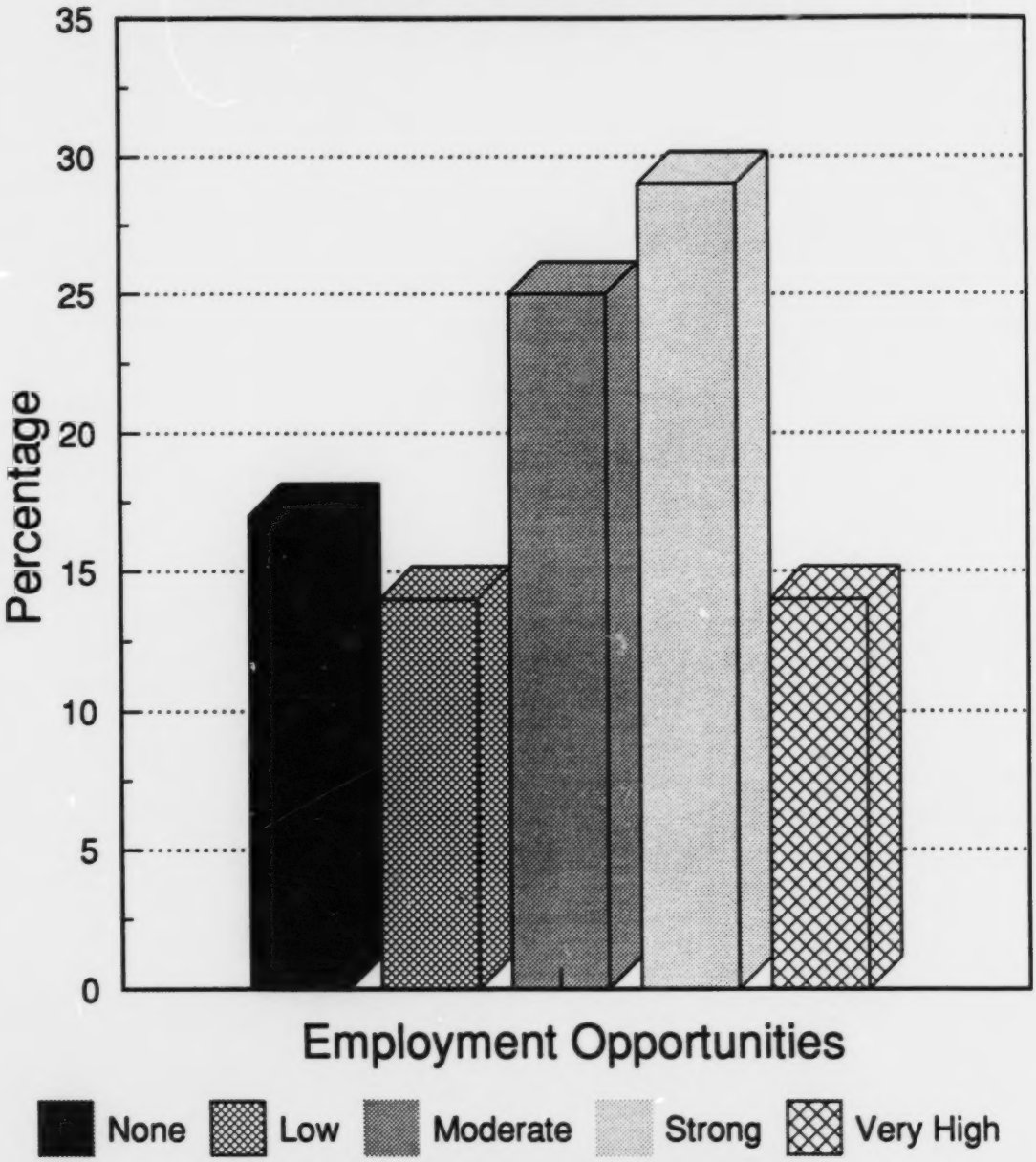


Statewide Percentage Response to Question No. 7,
Employment Opportunities Next Two Years for
Business Management (Total Responses = 202).

Chart 8

Small Business Management

1992 Marketing and Management Survey

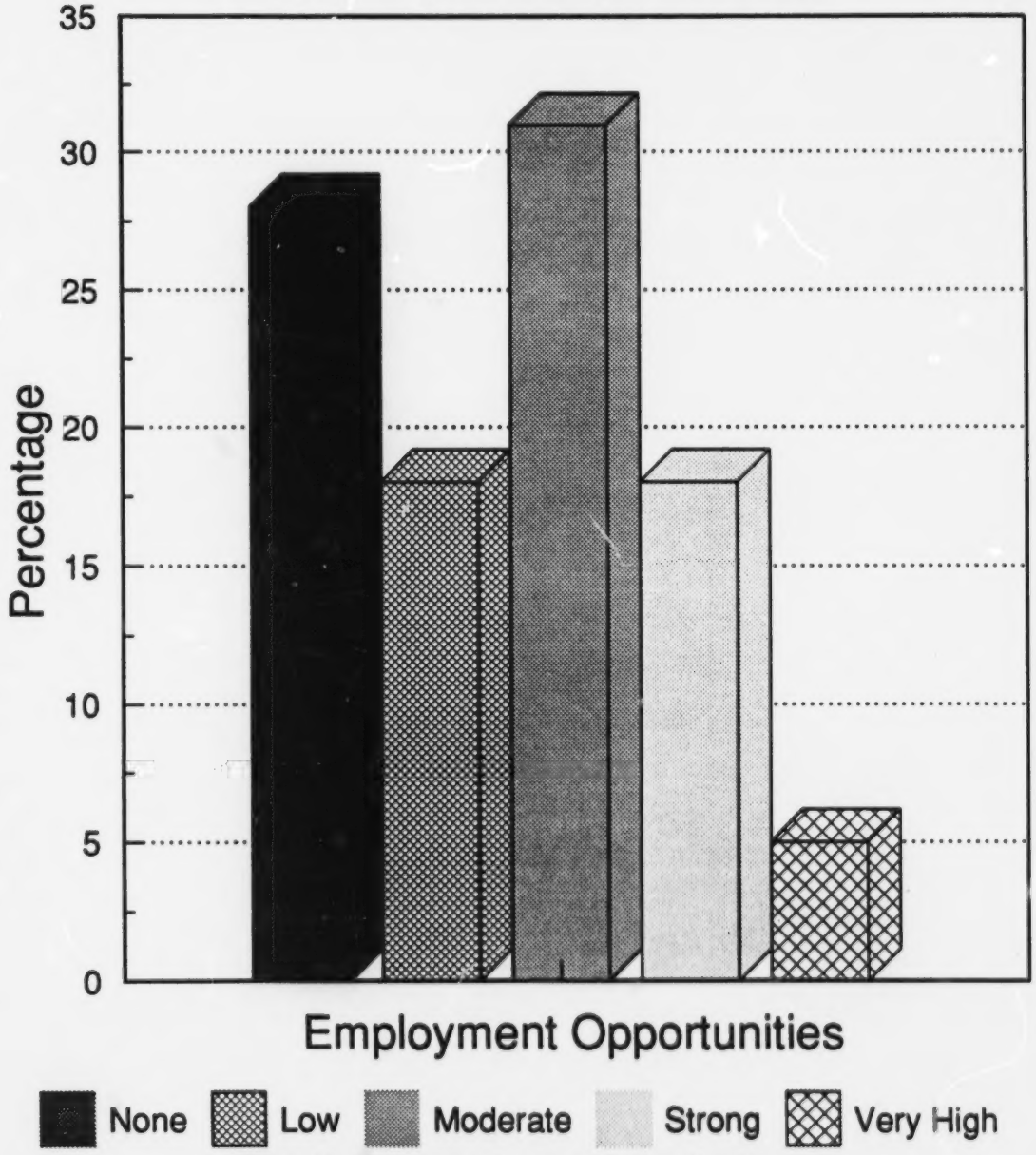


Statewide Percentage Response to Question No. 8, Employment Opportunities Expected Over Next Two Years for Small Bus. Management (Responses=180).

Chart 9

Hotel/Motel Management

1992 Marketing and Management Survey

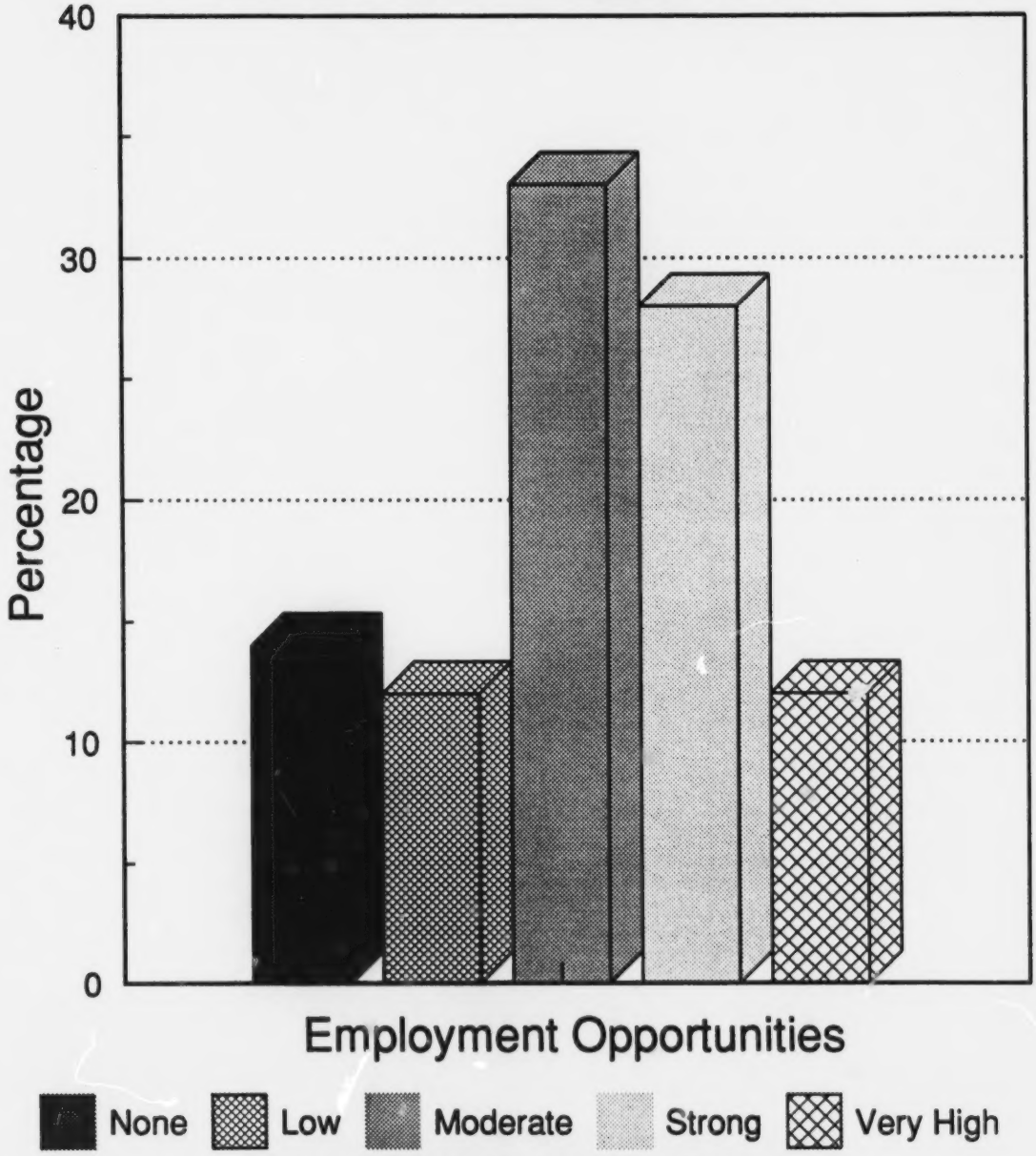


Statewide Percentage Response to Question No. 9, Employment Opportunities Expected Over Next Two Years for Hotel/Motel Mgmt. (Responses = 175).

Chart 10

Marketing and Distribution

1992 Marketing and Management Survey

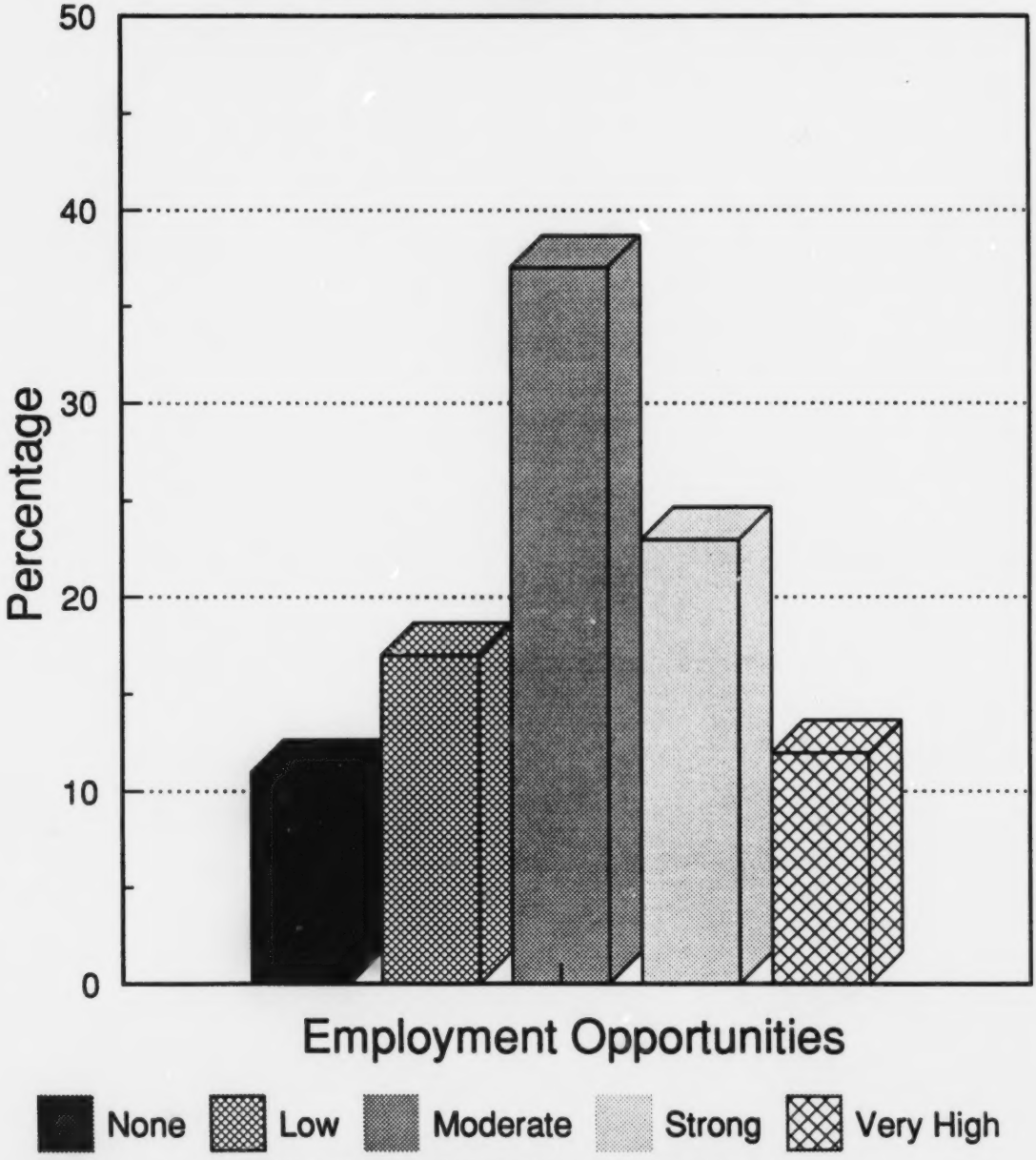


Statewide Percentage Response for Question 10, Employment Opportunities Expected Over Next Two Years for Mktg. and Dist. (Responses = 192).

Chart 11

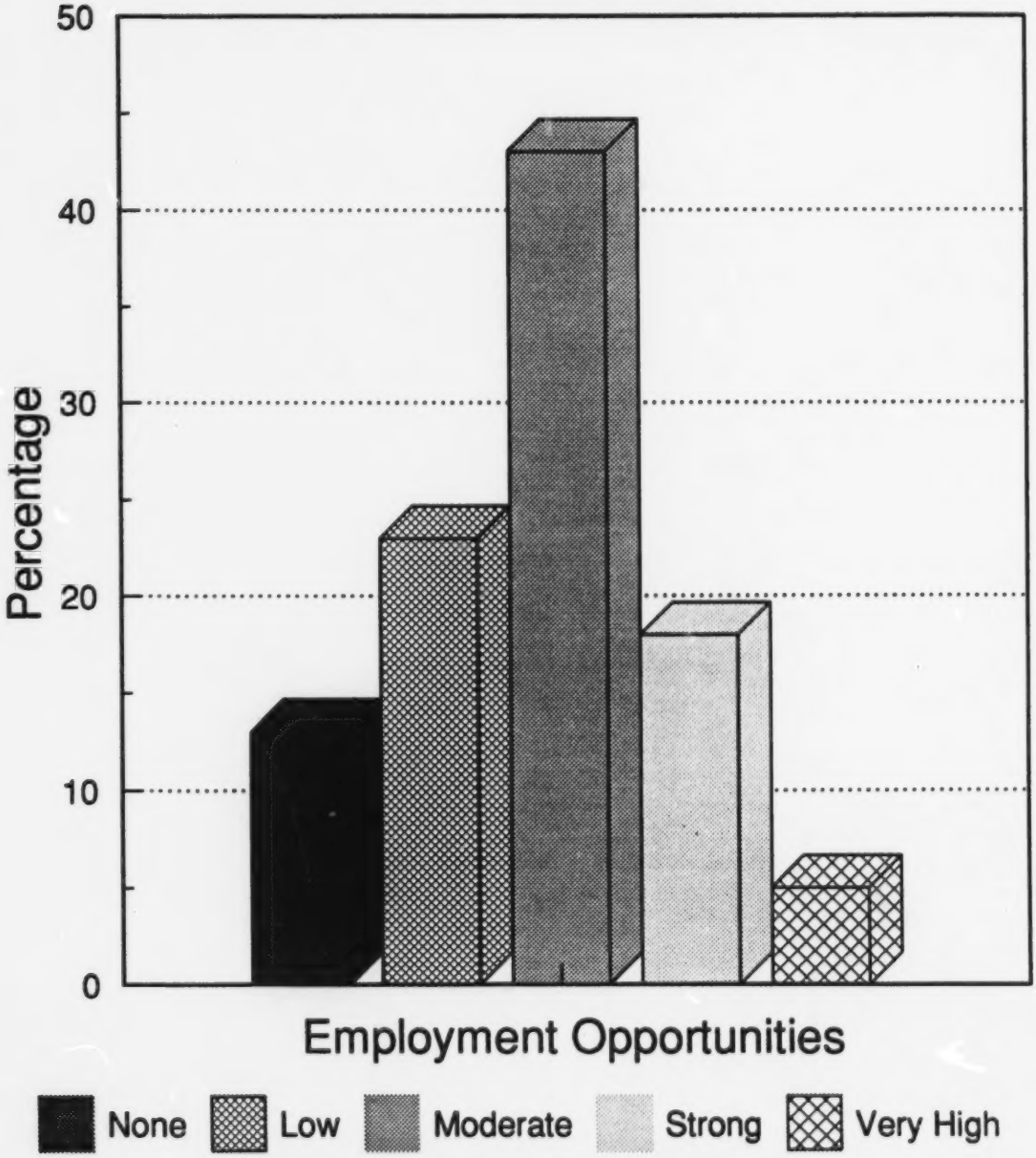
Advertising

1992 Marketing and Management Survey



Statewide Percentage Response for Question 11, Employment Opportunities Expected Over Next Two Years for Advertising (Total Responses = 188).

Chart 12
Purchasing
1992 Marketing and Management Survey

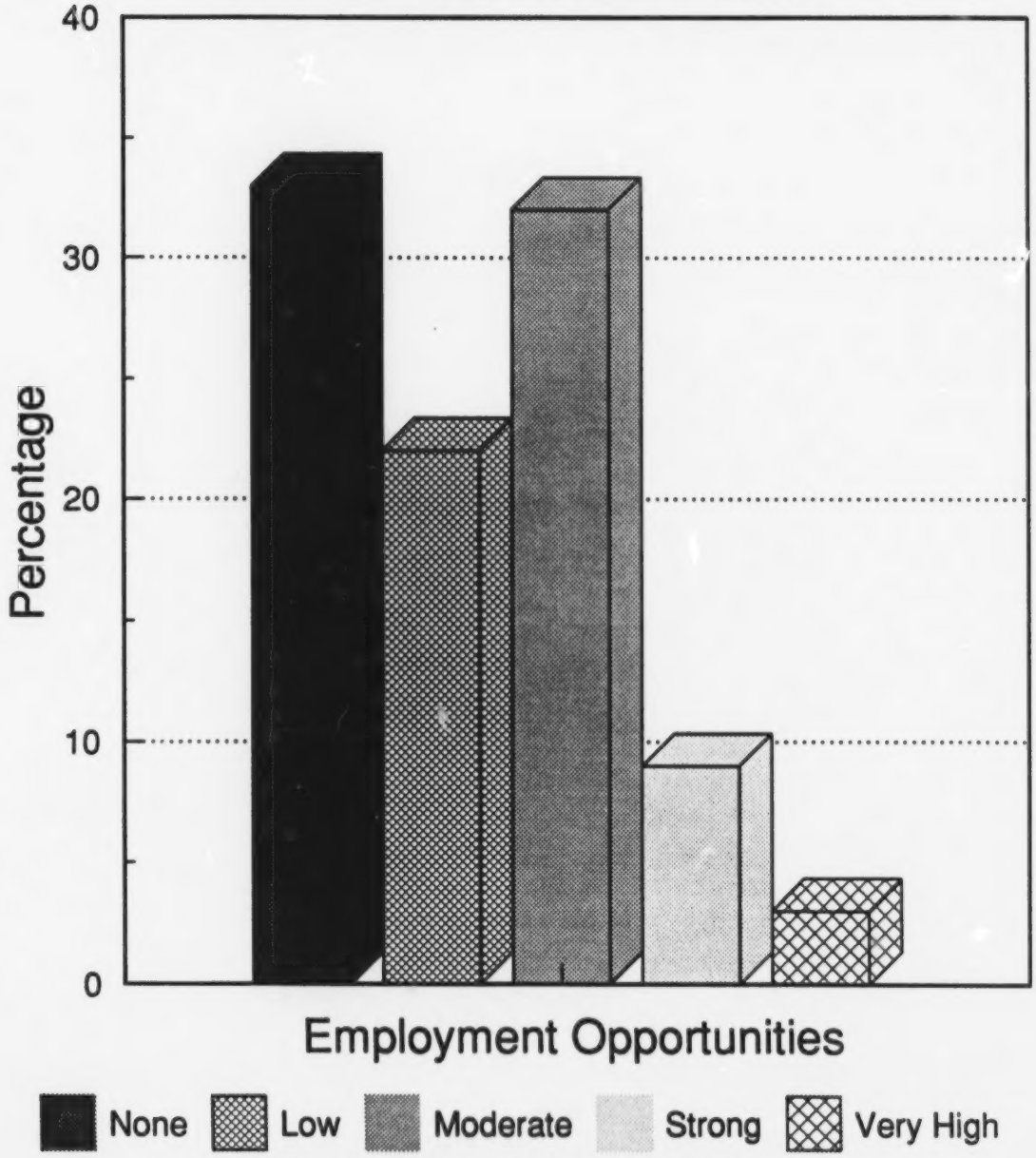


Statewide Percentage Response for Question 12, Employment Opportunities Expected Over Next Two Years for Purchasing (Total Responses = 192).

Chart 13

Apparel and Accessories

1992 Marketing and Management Survey

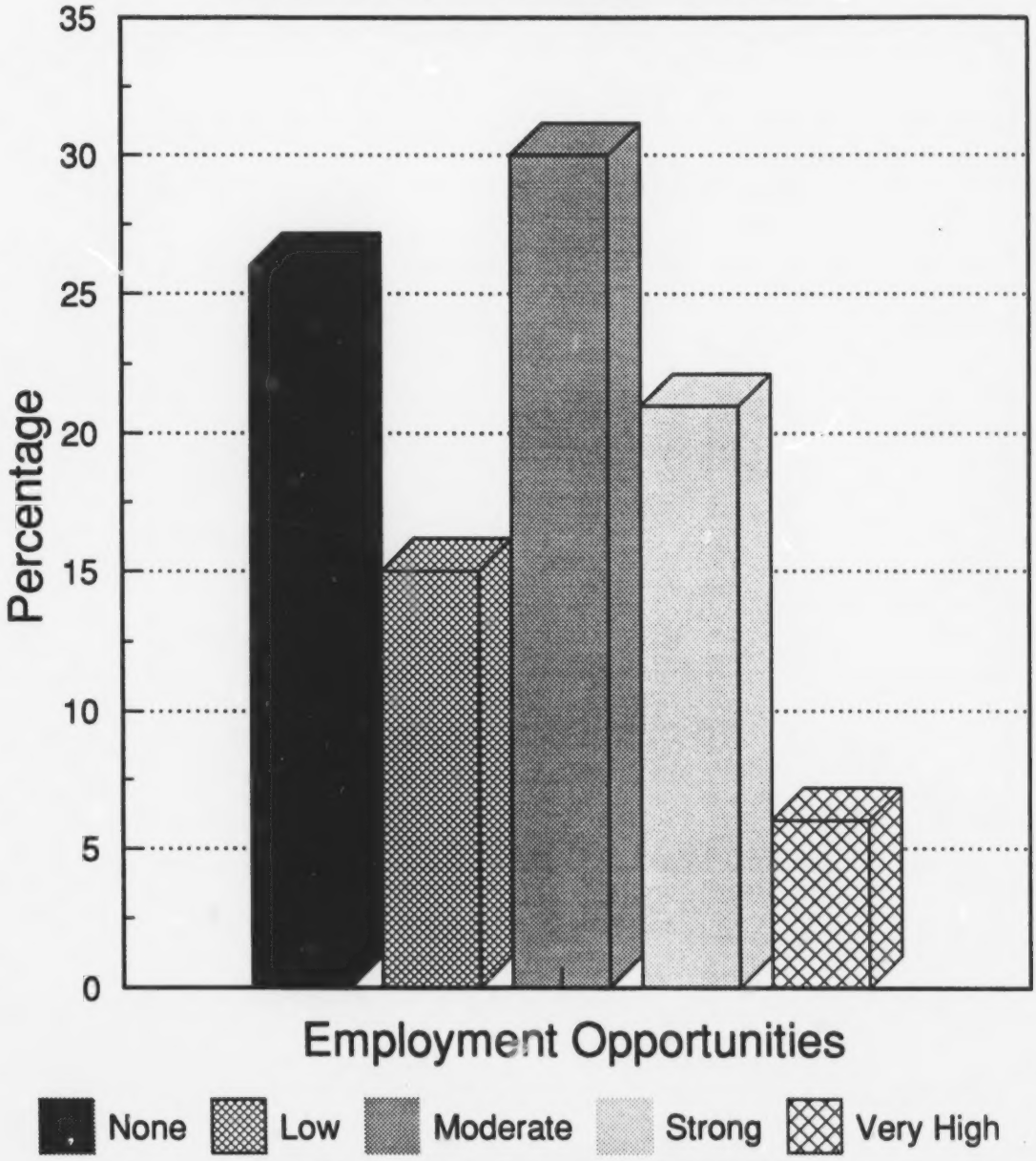


Statewide Percentage Response for Question 13, Employment Opportunities Expected Over Next Two Years for Apparel and Access. (Responses = 184).

Chart 14

Food (Wholesale and Retail)

1992 Marketing and Management Survey

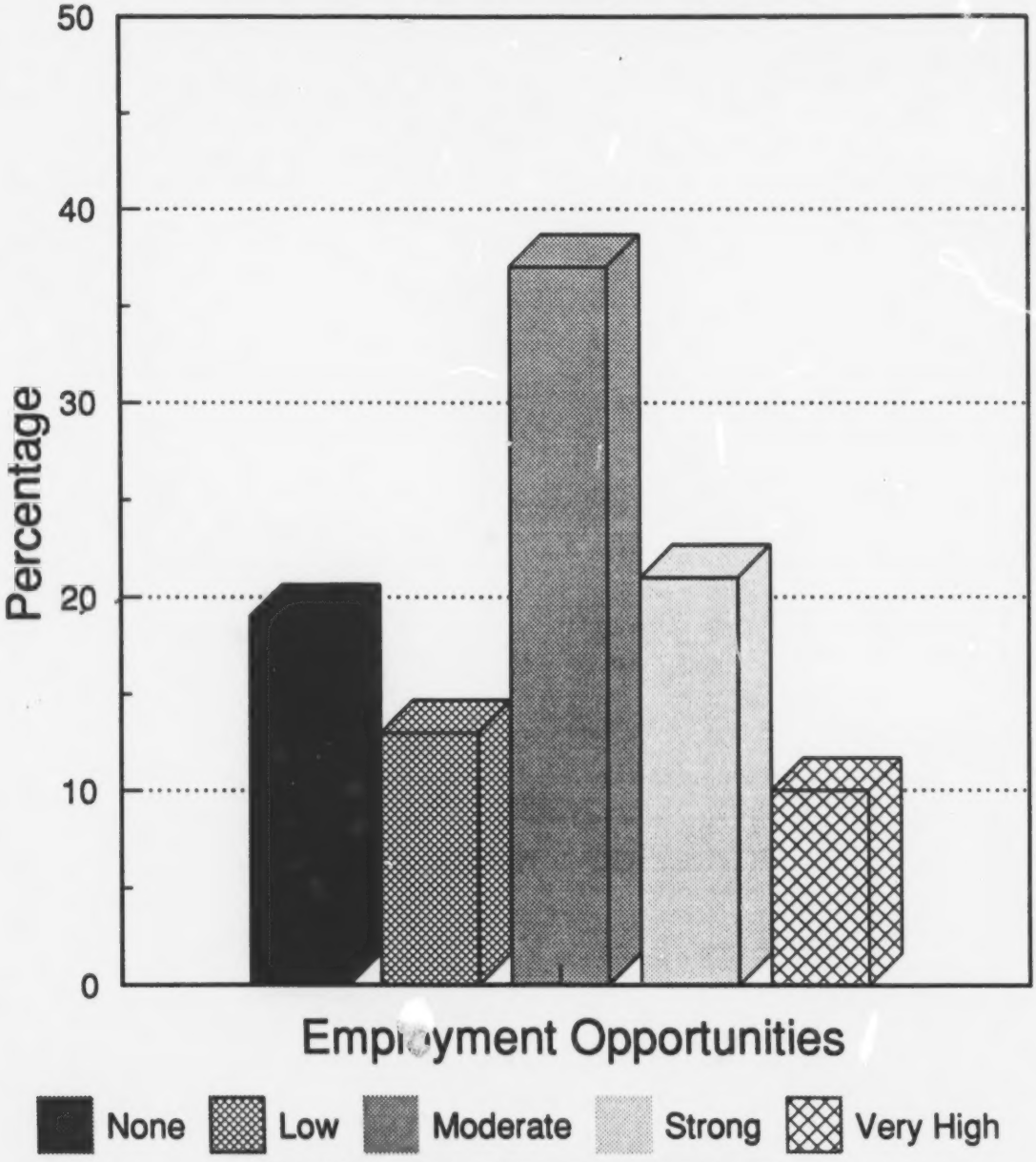


Statewide Percentage Response for Question 14, Employment Opportunities Expected Over Next Two Years for Food (Total Responses = 182).

Chart 15

Merchandising (Including Sales)

1992 Marketing and Management Survey

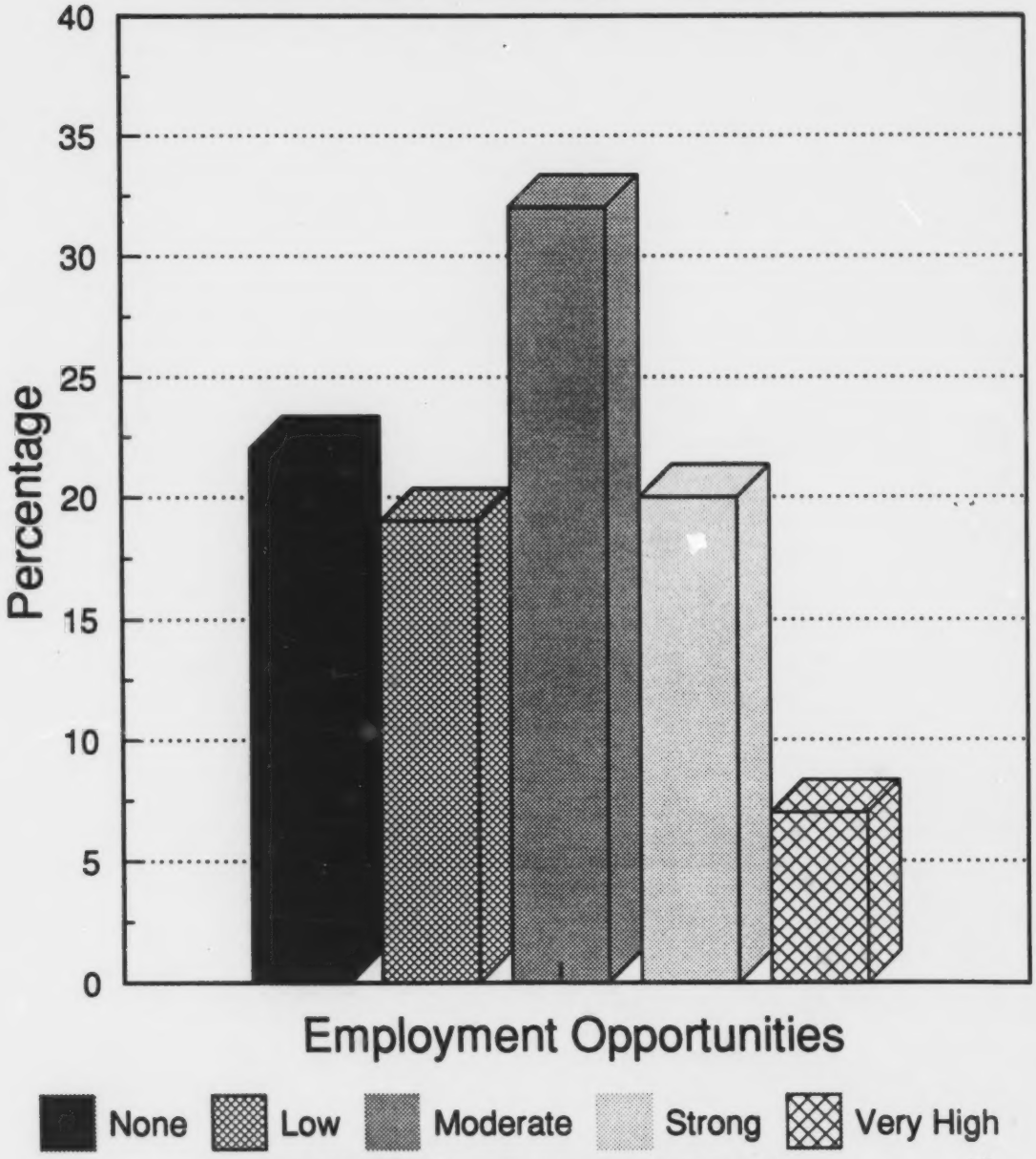


Statewide Percentage Response to Question 15, Employment Opportunities Expected Over Next Two Years for Merchandising (Total Responses = 197).

Chart 16

Transportation and Materials Moving

1992 Marketing and Management Survey

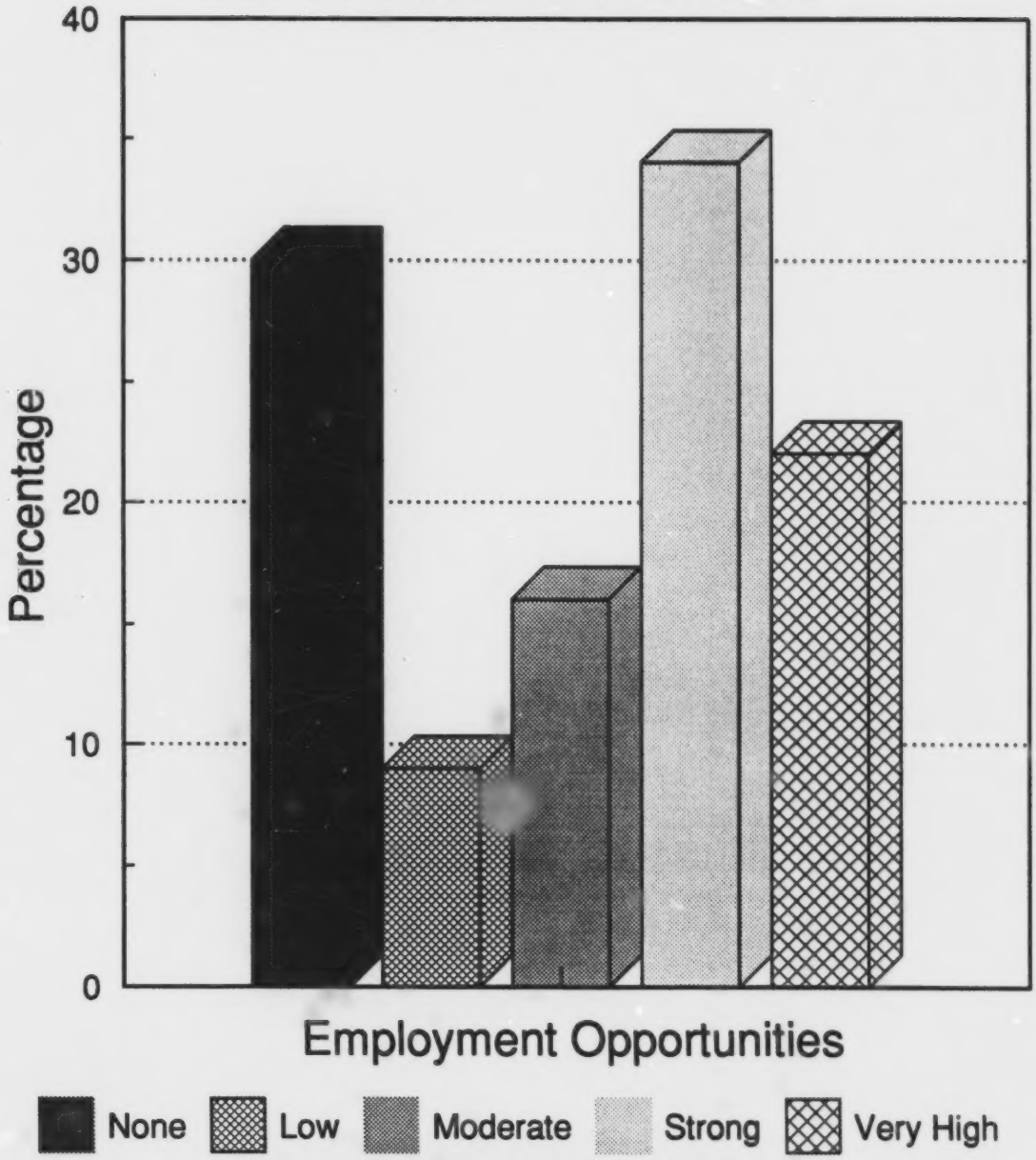


Statewide Percentage Response to Question 16, Employment Opportunities Expected Over Next Two Years for Trans. and Mtls. Mvg. (Responses=188).

Chart 17

International Trade

1992 Marketing and Management Survey

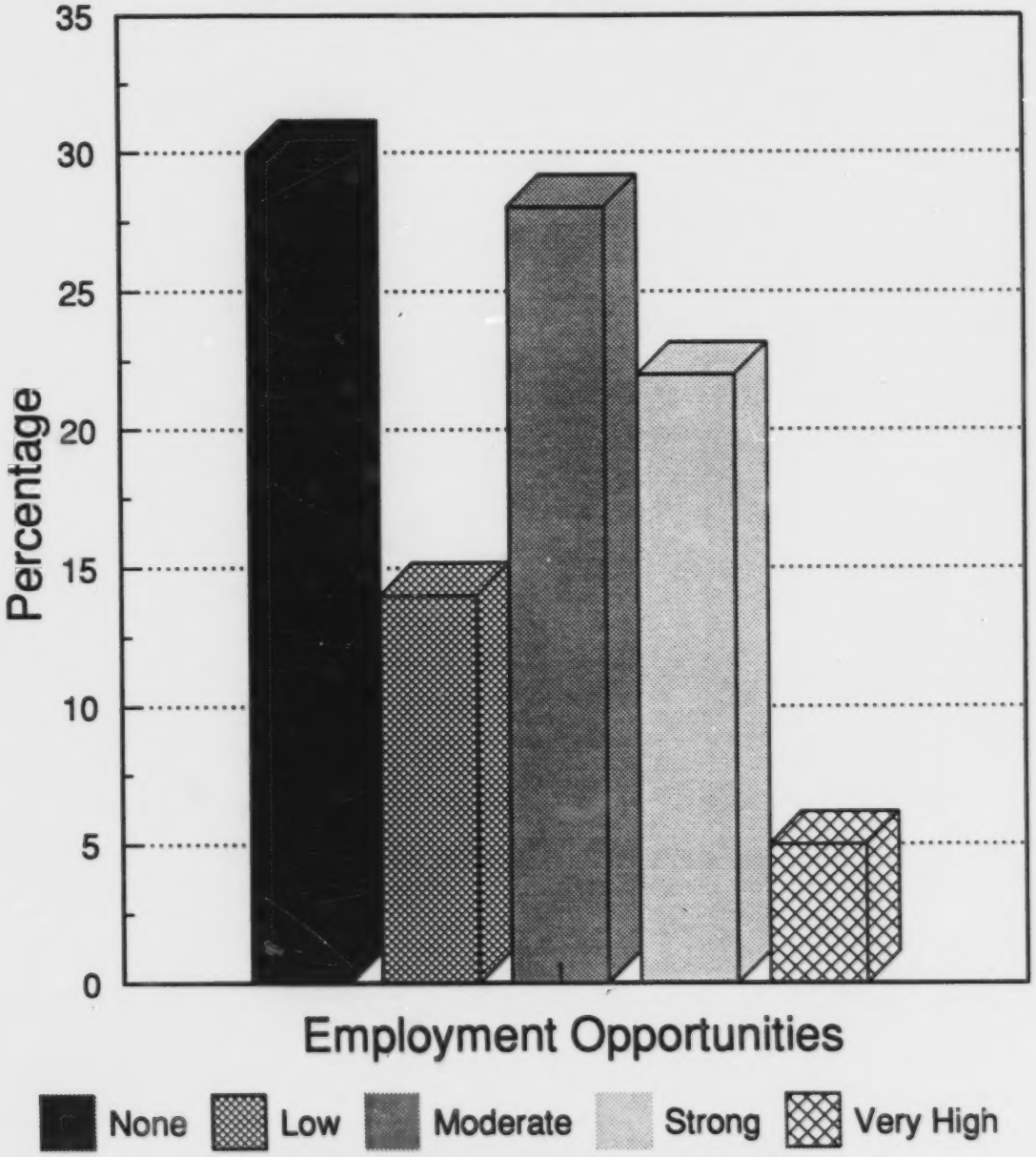


Statewide Percentage Response to Question 17, Employment Opportunities Expected Over Next Two Years for International Trade (Responses=171).

Chart 18

Traffic Management

1992 Marketing and Management Survey

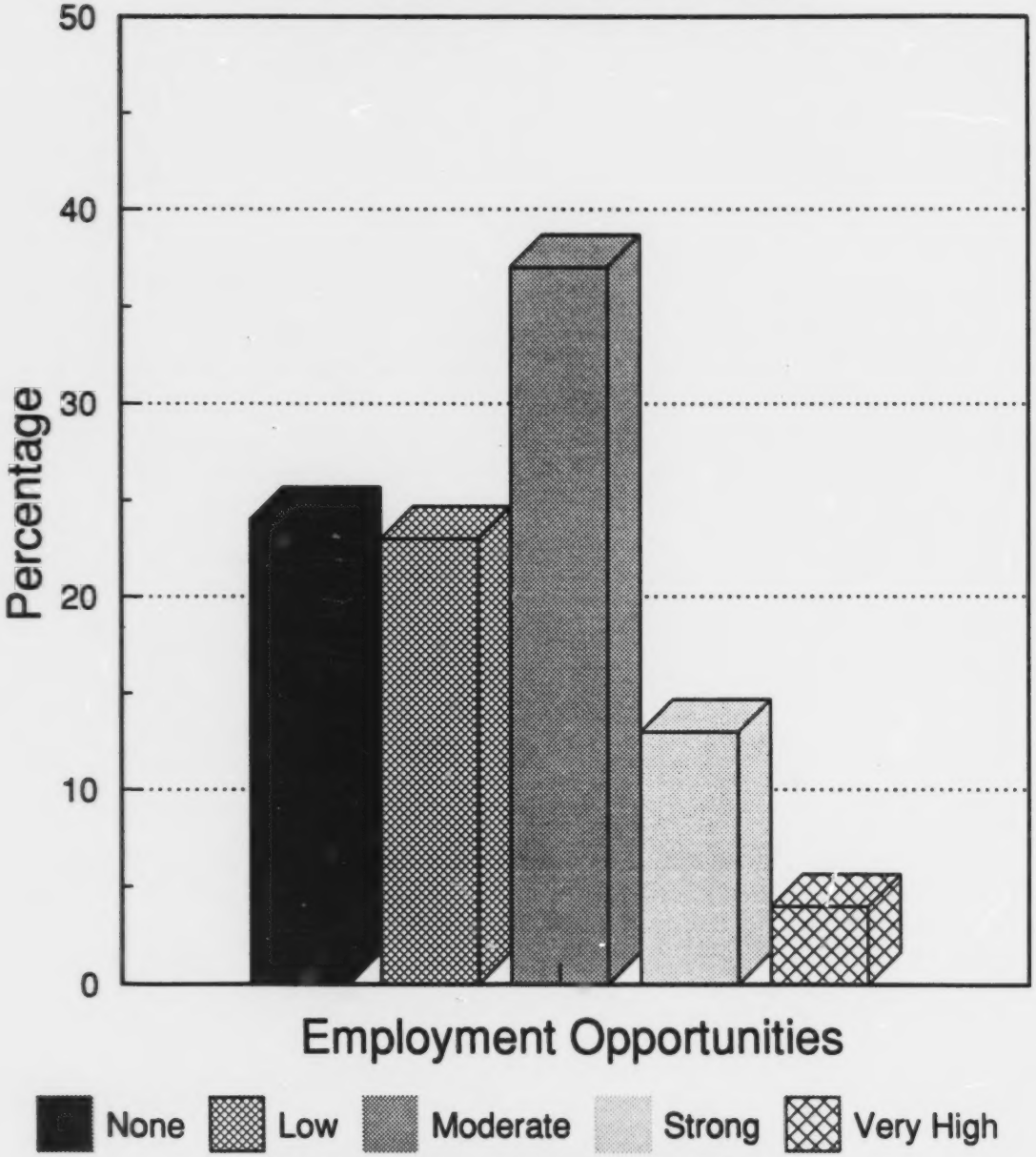


Statewide Percentage Response to Question 18, Employment Opportunities Expected Over Next Two Years for Traffic Mgmt. (Responses = 183).

Chart 19

Material Support

1992 Marketing and Management Survey

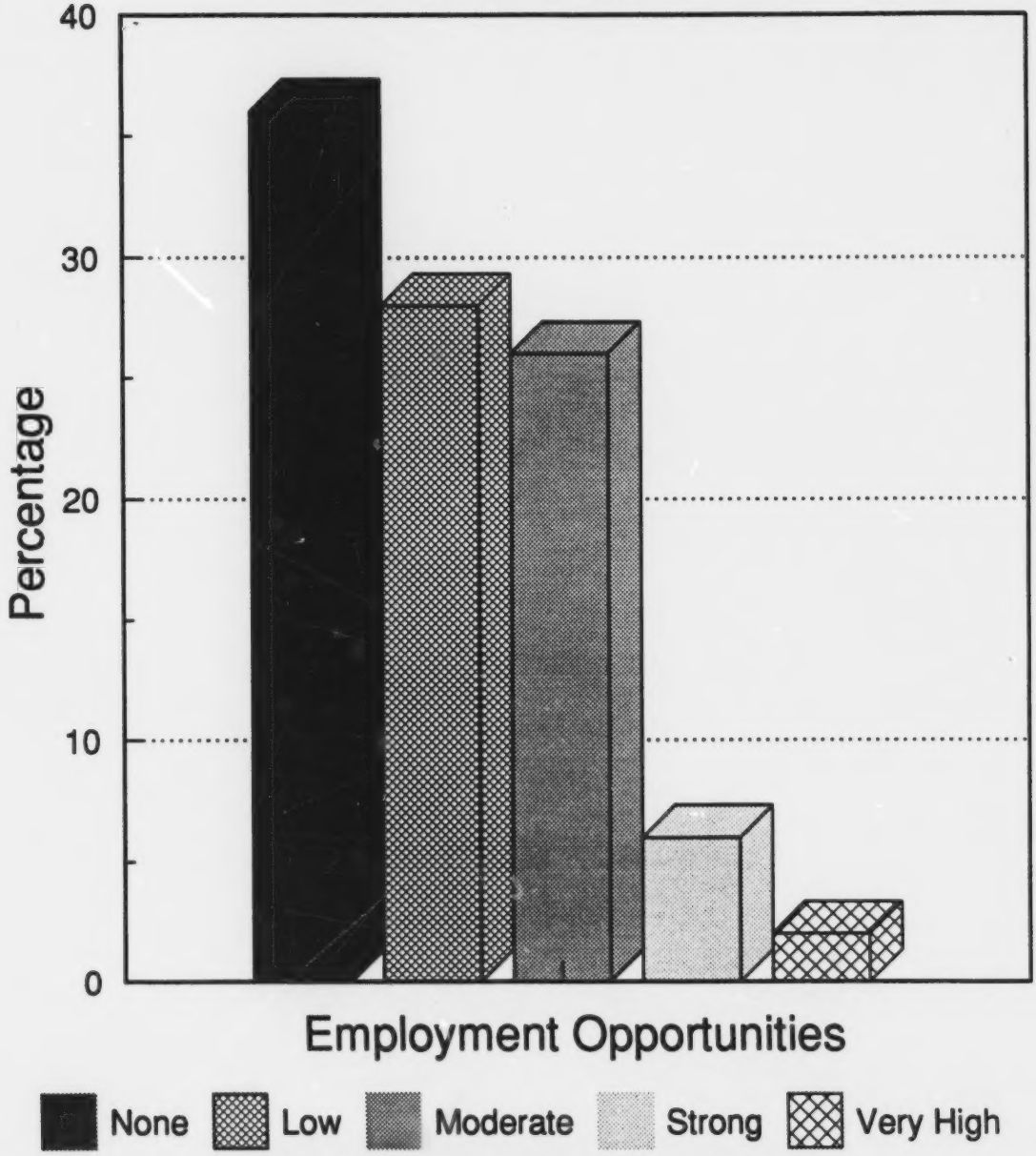


Statewide Percentage Response for Question 19, Employment Opportunities Expected Over Next Two Years for Material Support (Responses = 172).

Chart 20

Airline Ground Crew

1992 Marketing and Management Survey

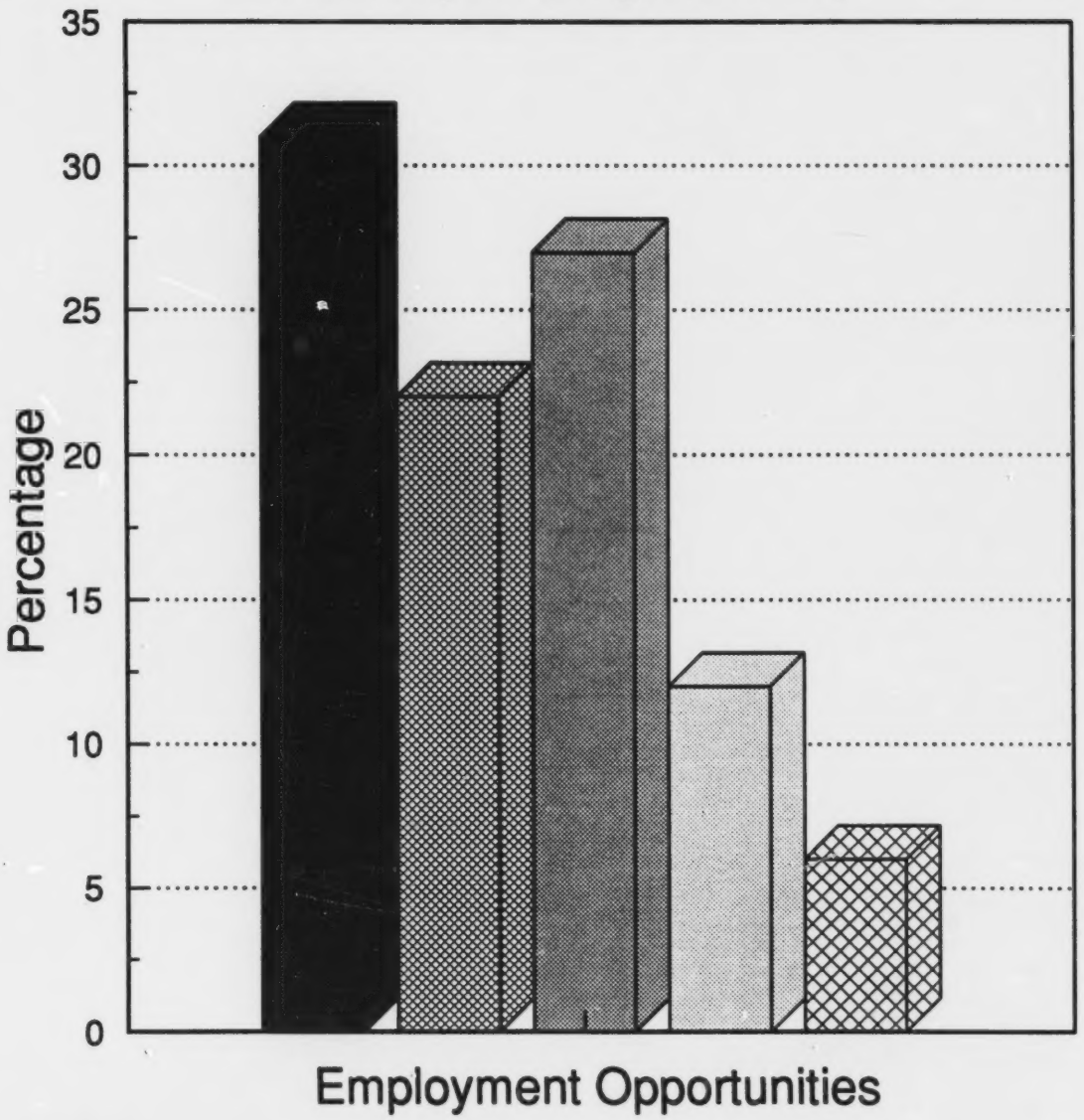


Statewide Percentage Response for Question 20, Employment Opportunities Expected Over Next Two Years for Airline Grnd. Crew (Responses = 182).

Chart 21

Real Estate

1992 Marketing and Management Survey

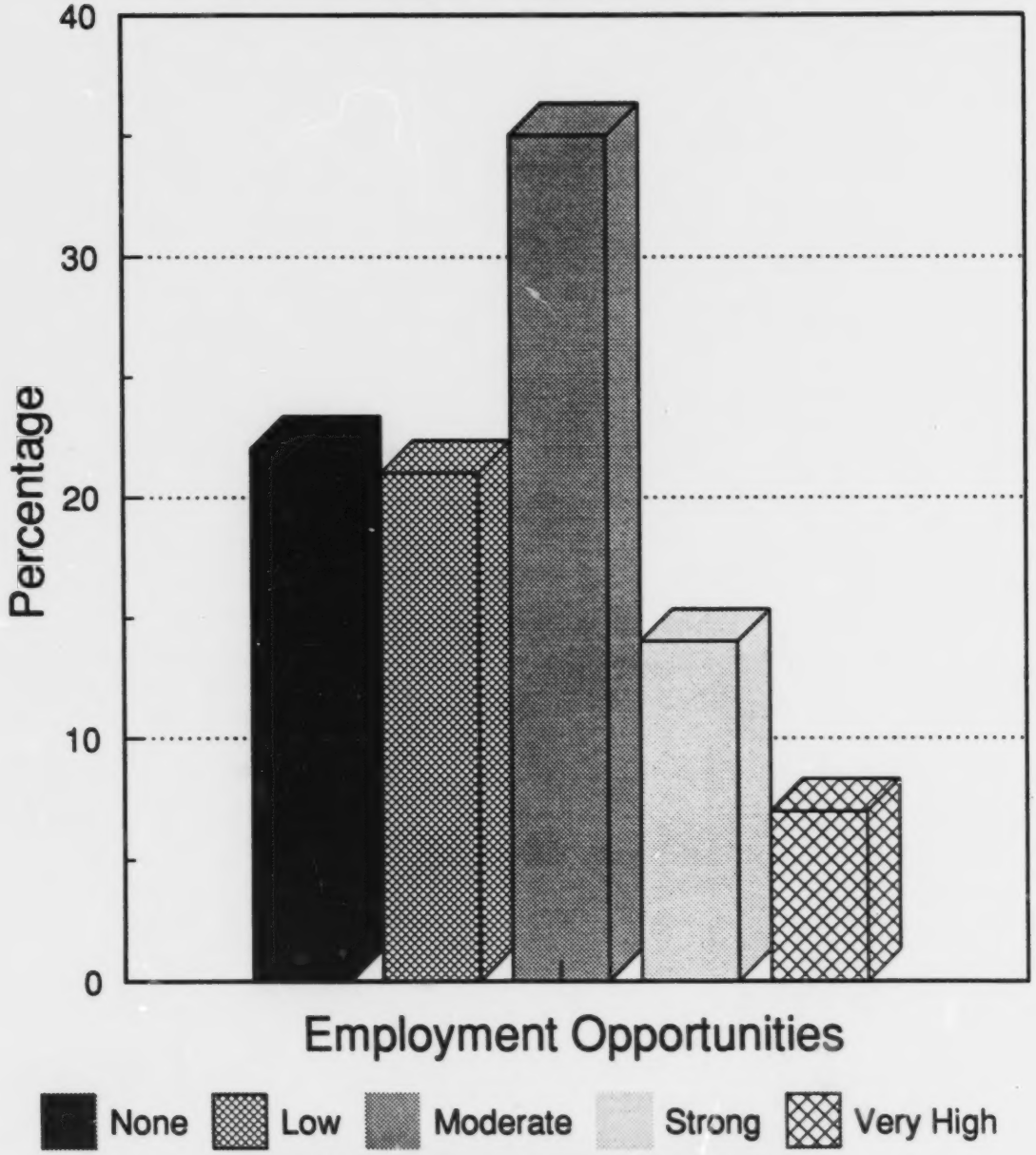


Statewide Percentage Response for Question 21, Employment Opportunities Expected Over Next Two Years for Real Estate (Total Responses = 190).

Chart 22

Insurance

1992 Marketing and Management Survey

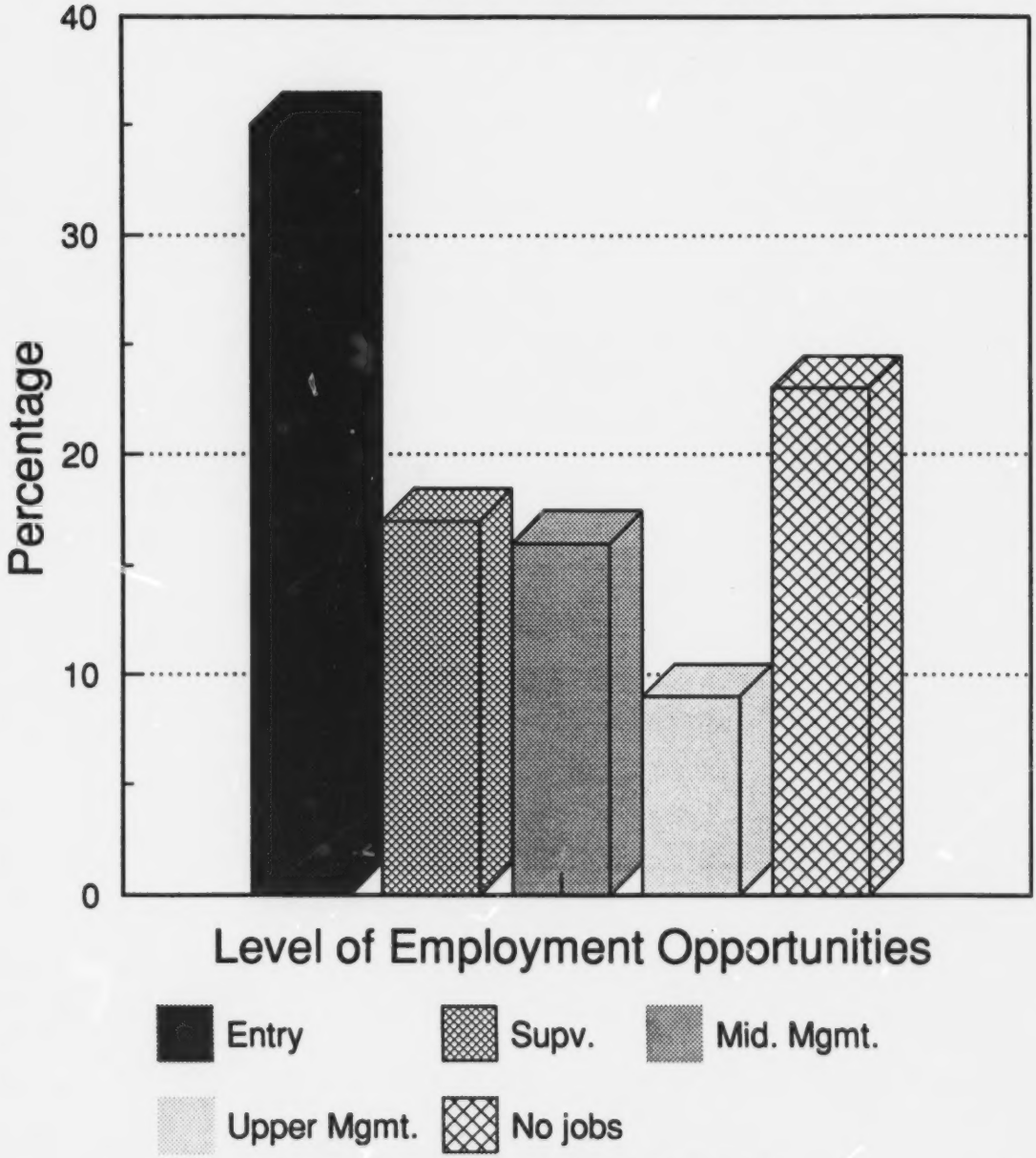


Statewide Percentage Response for Question 22, Employment Opportunities Expected Over Next Two Years for Insurance (Total Responses = 189).

Chart 23

Tax Studies

1992 Marketing and Management Survey

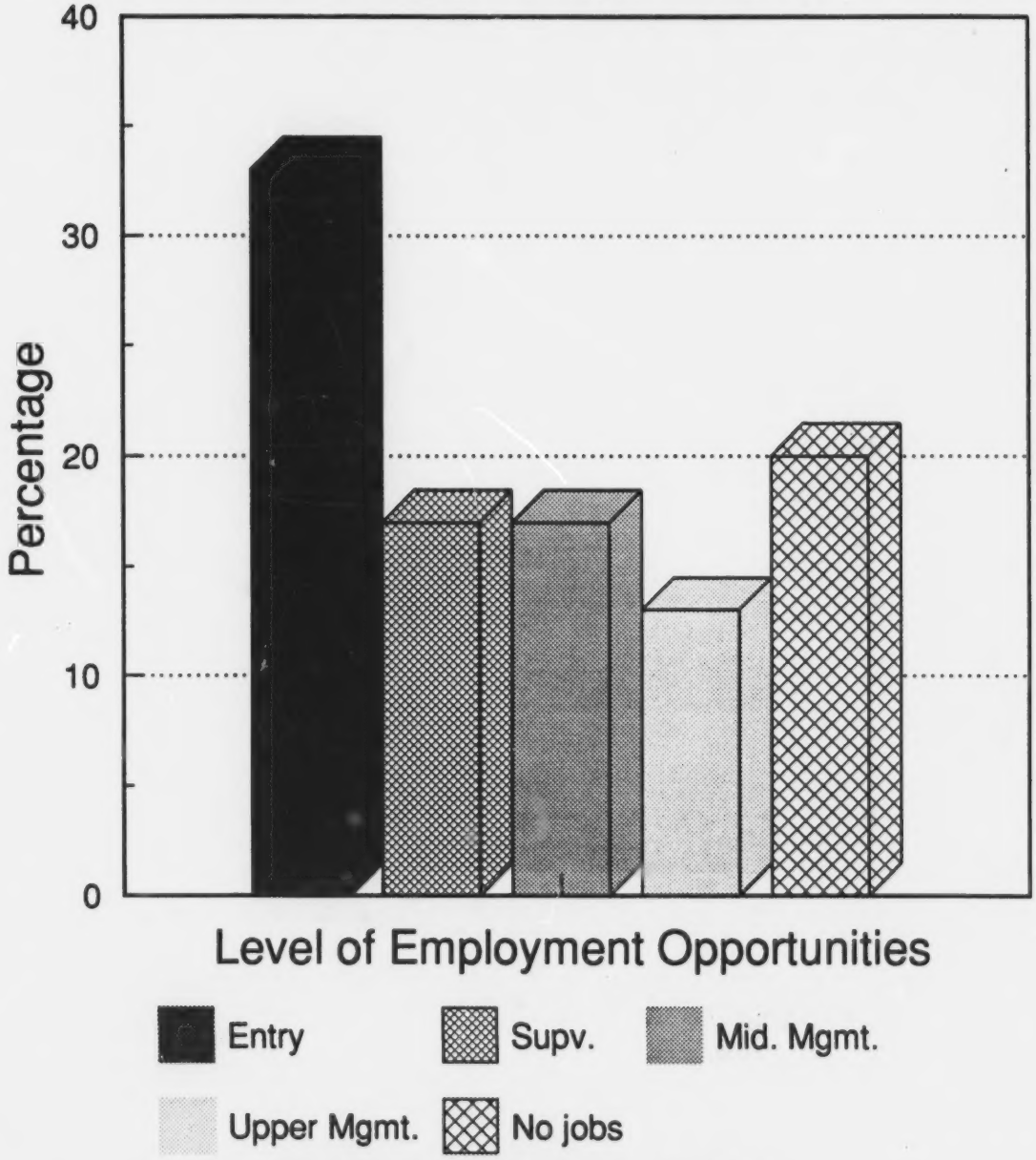


Statewide Percentage Response to Question 23, Level of Employment Opportunities for Tax Studies (Total Responses = 128)

Chart 24

Banking and Finance

1992 Marketing and Management Survey

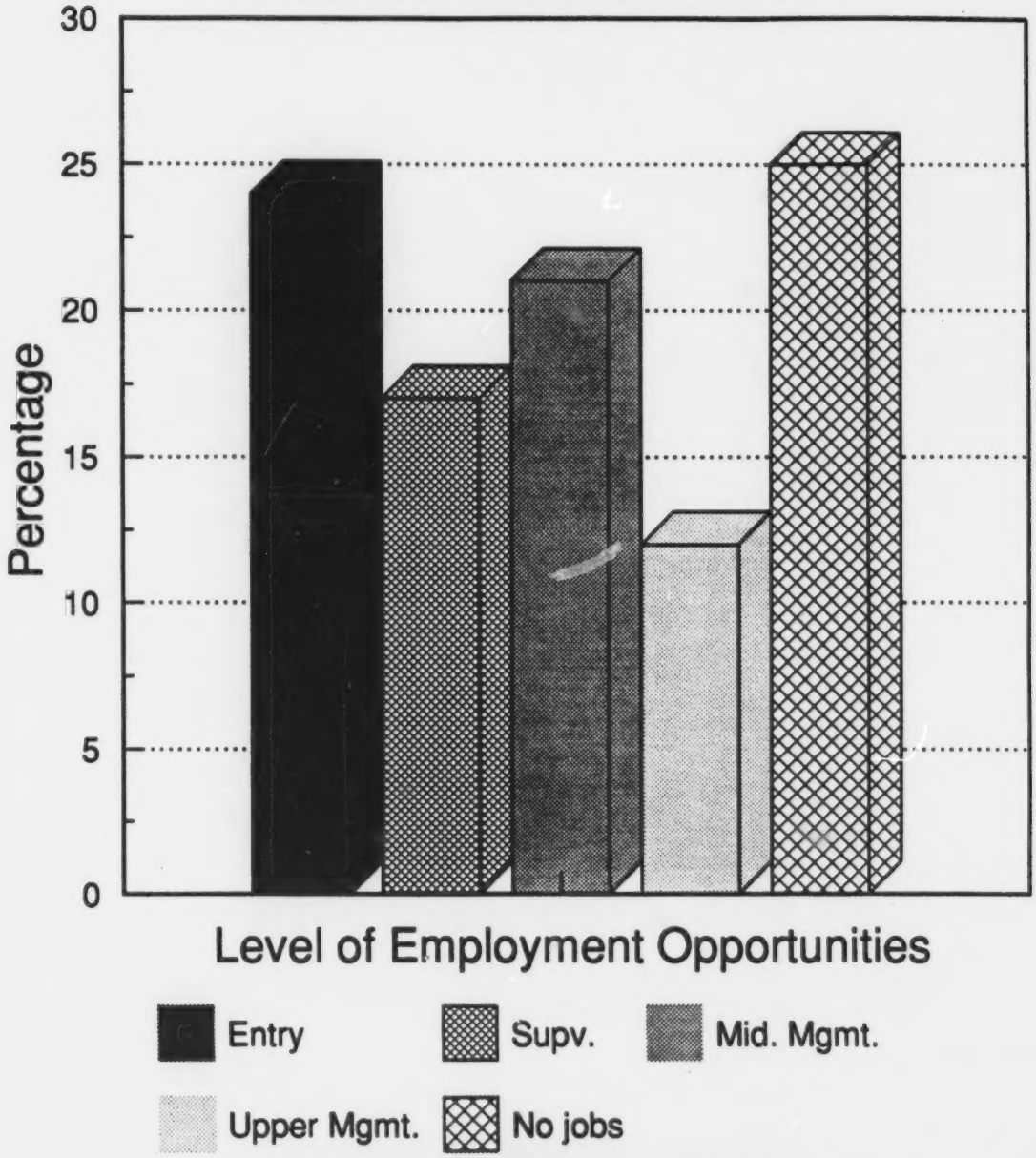


Statewide Percentage Response to Question 24, Level of Employment Opportunities for Banking and Finance (Total Responses = 126)

Chart 25

Banking (Management)

1992 Marketing and Management Survey

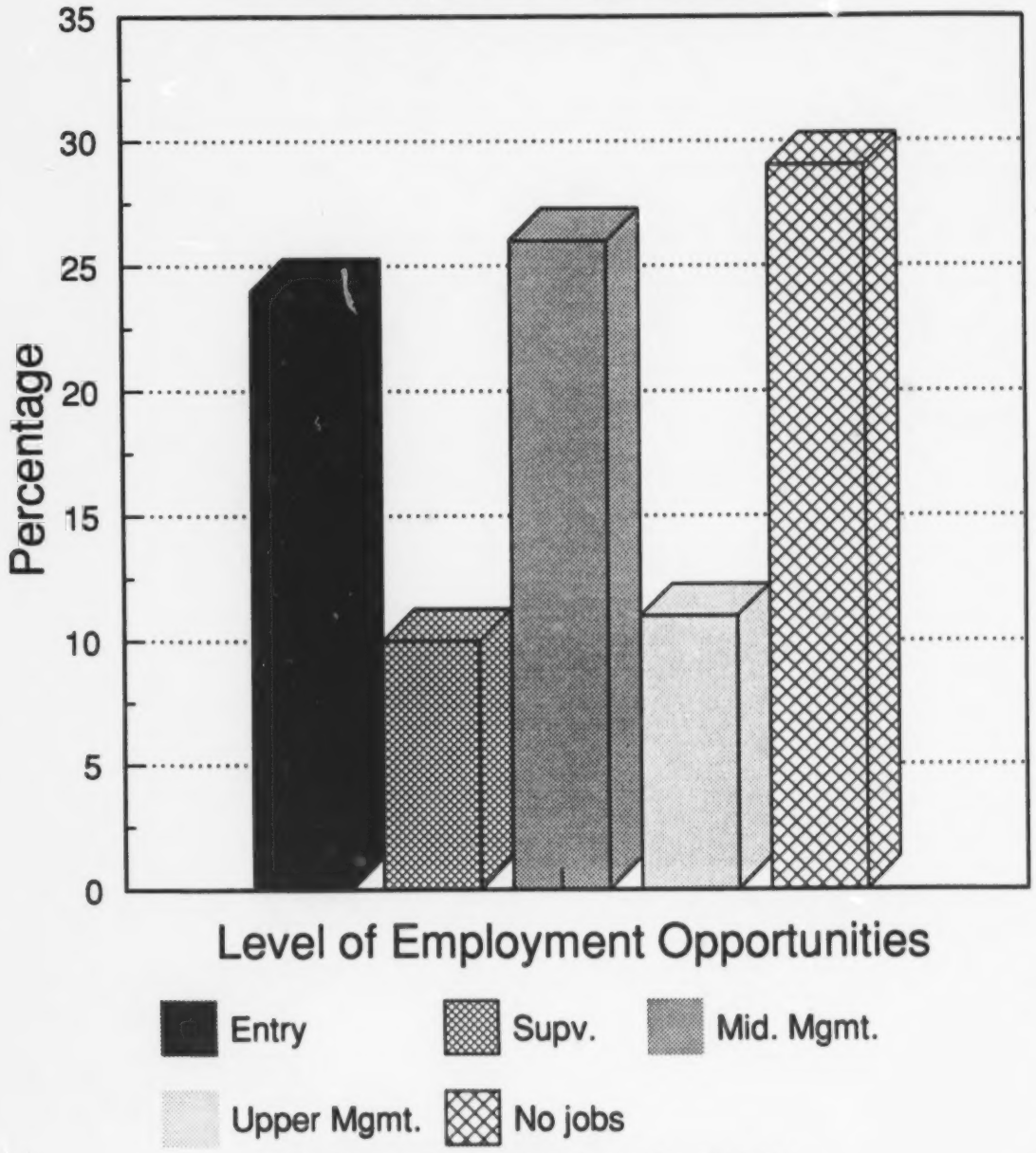


Statewide Percentage Response to Question 25, Level of Employment Opportunities for Banking (Management) (Total Responses = 120)

Chart 26

Investment and Securities

1992 Marketing and Management Survey

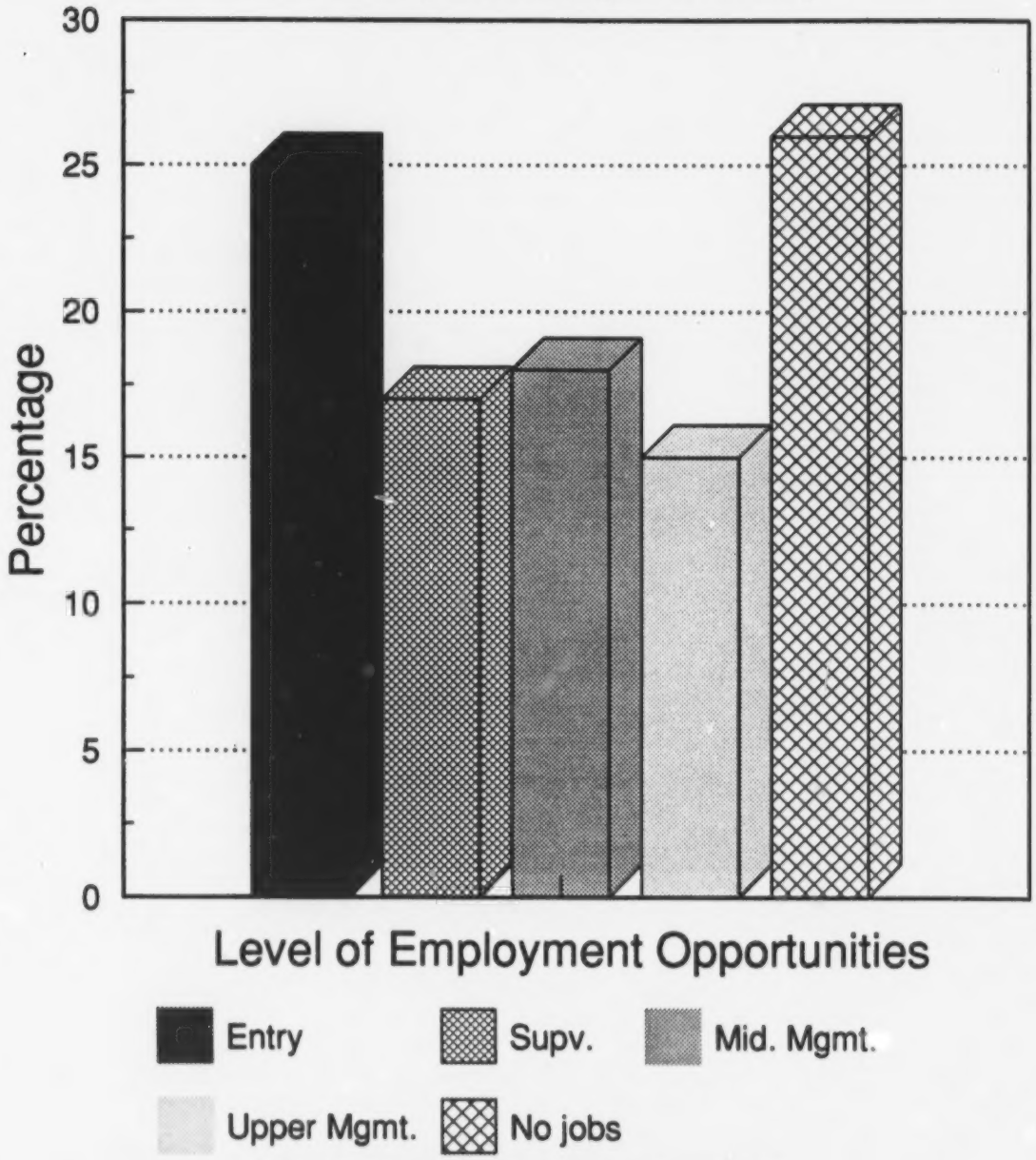


Statewide Percentage Response to Question 26, Level of Employment Opportunities for Investment and Securities (Total Responses = 117)

Chart 27

Credit Management

1992 Marketing and Management Survey

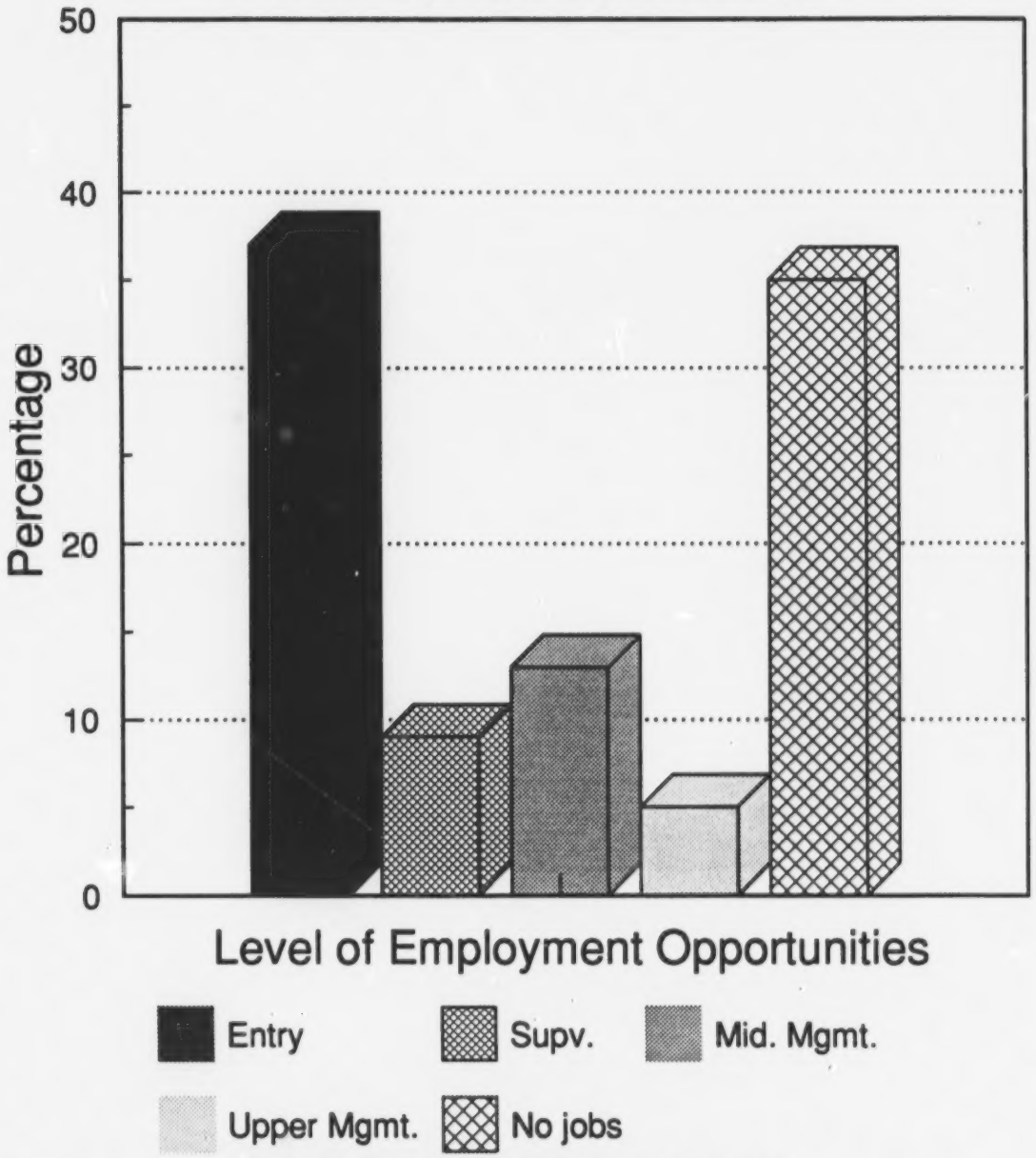


Statewide Percentage Response for Question 27
Level of Employment Opportunities for
Credit Management (Total Responses = 117)

Chart 28

Cashiering or Bank Telling

1992 Marketing and Management Survey

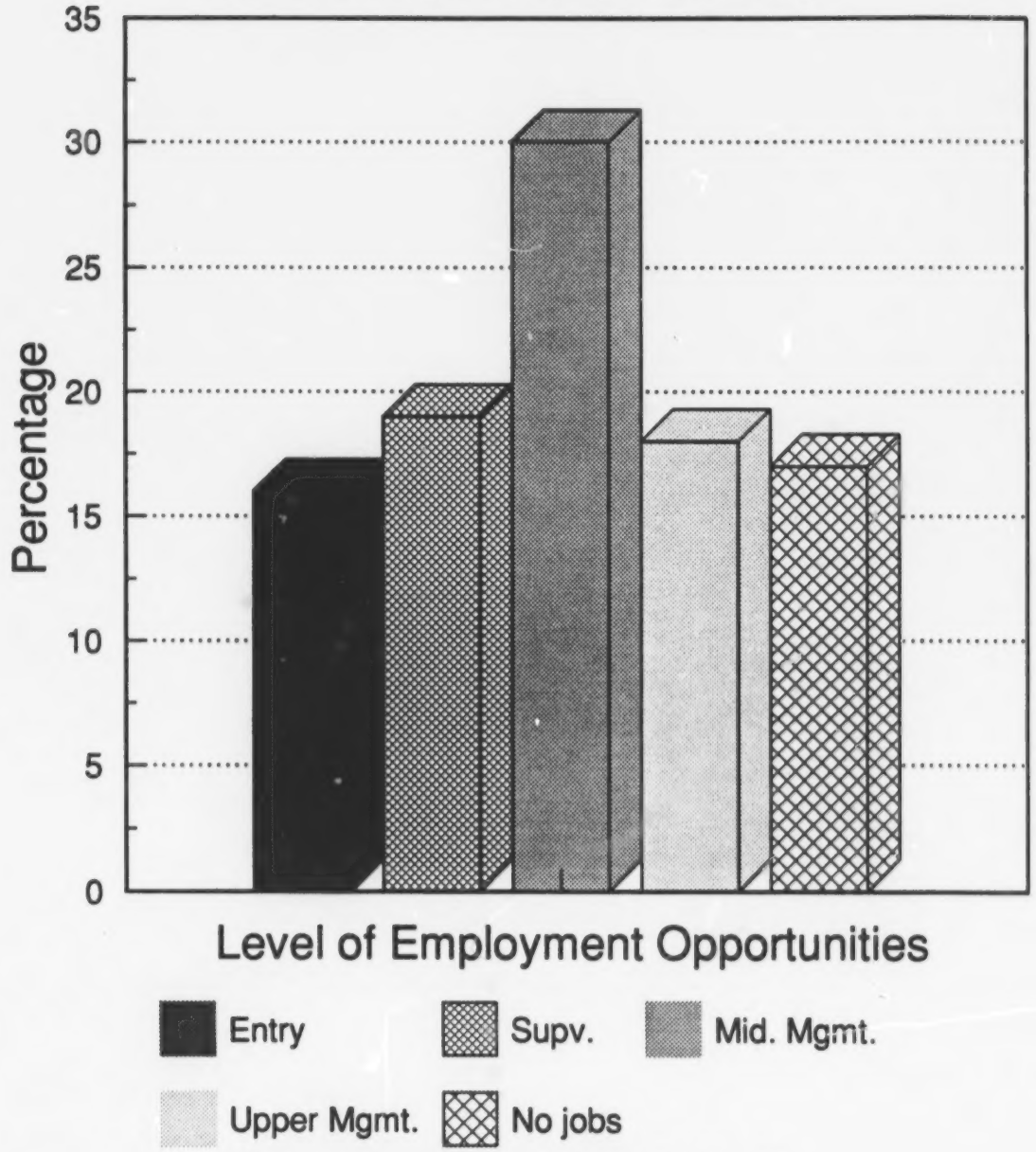


Statewide Percentage Response for Question 28, Level of Employment Opportunities for Cashiering or Bank Telling (Total Responses = 120)

Chart 29

Business Management

1992 Marketing and Management Survey

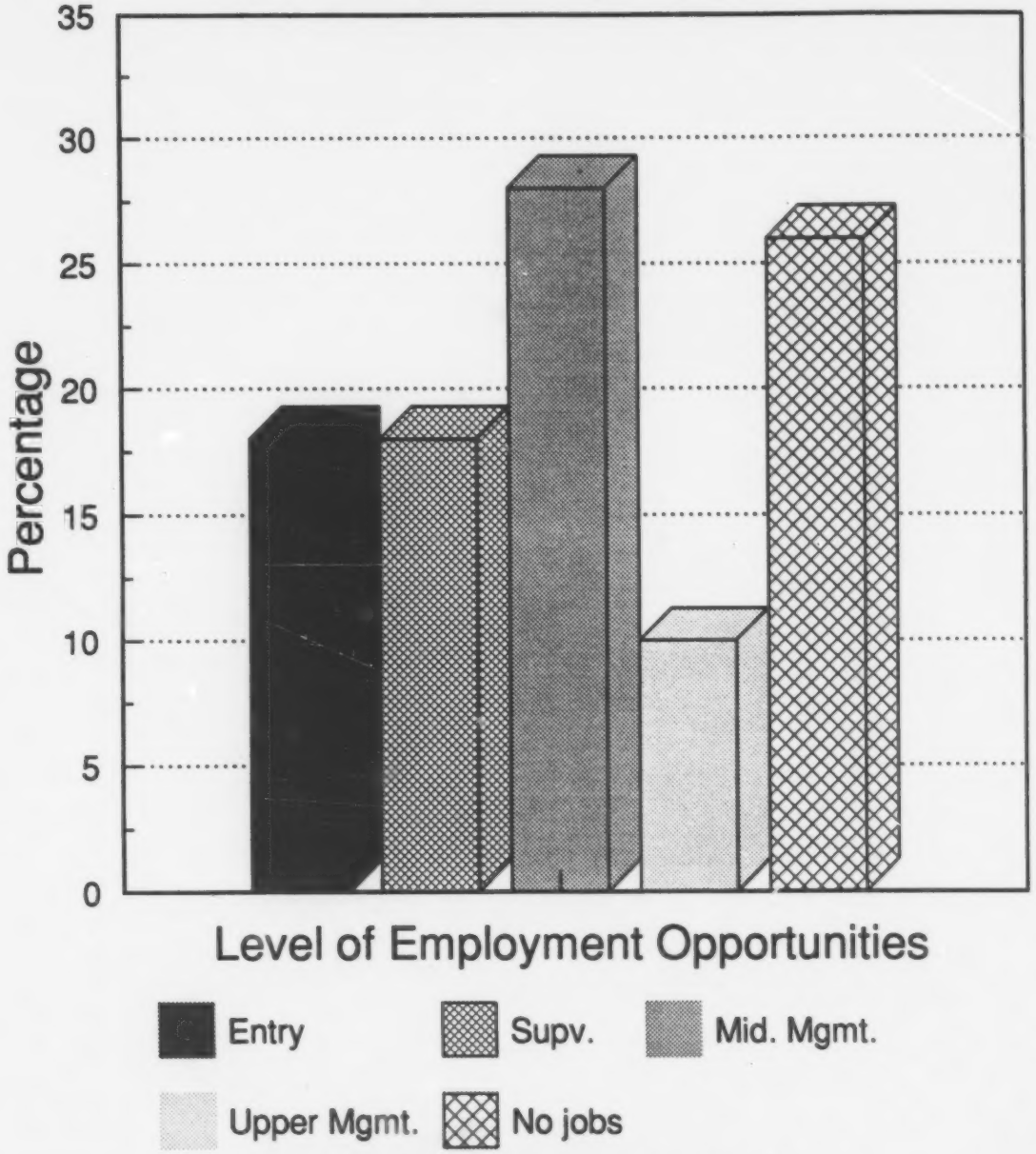


Statewide Percentage Response for Question 29,
Level of Employment Opportunities for
Business Management (Total Responses = 134)

Chart 30

Small Business Management

1992 Marketing and Management Survey

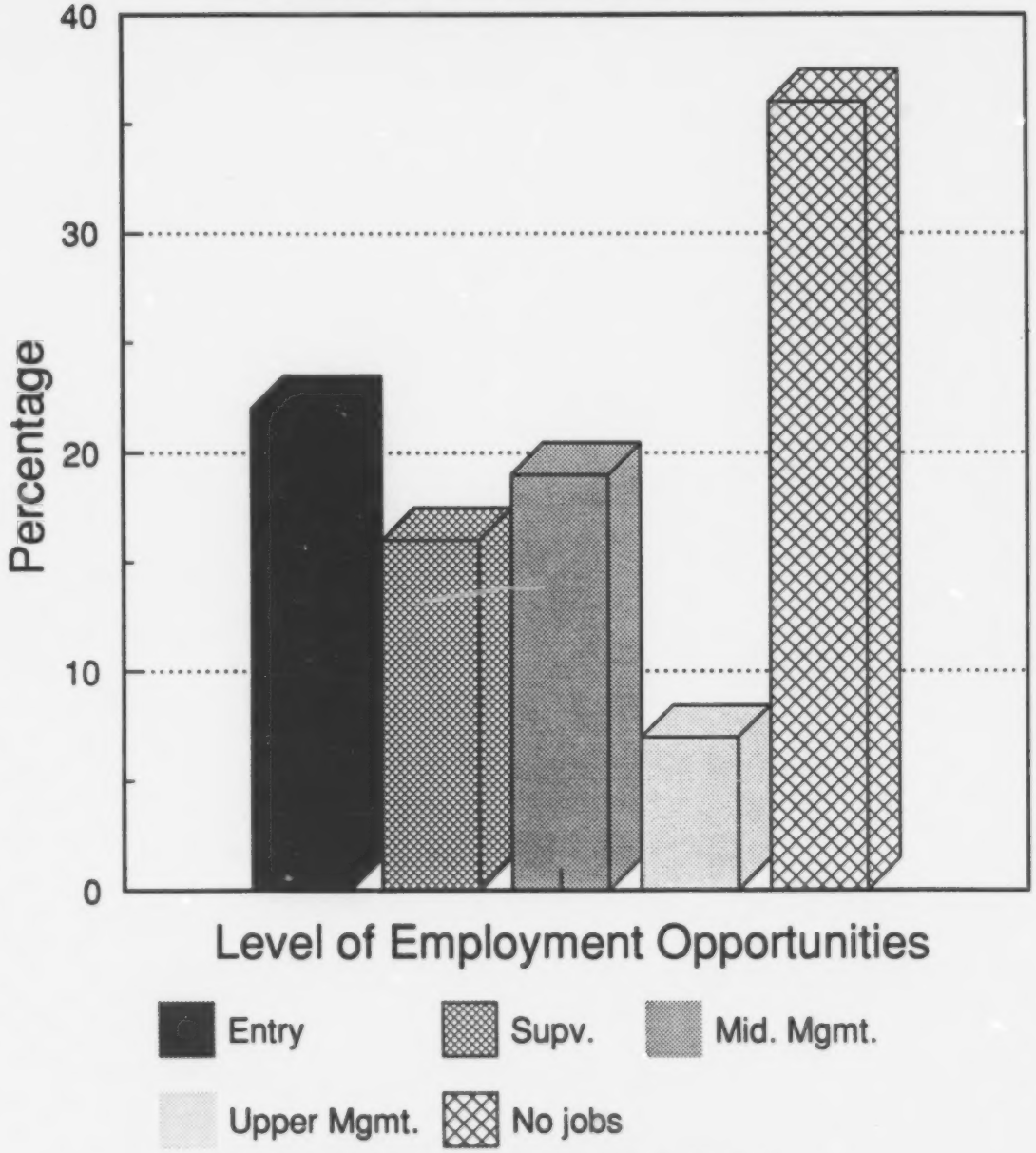


Statewide Percentage Response for Question 30, Level of Employment Opportunities for Small Business Management (Total Responses = 119)

Chart 31

Hotel/Motel Management

1992 Marketing and Management Survey

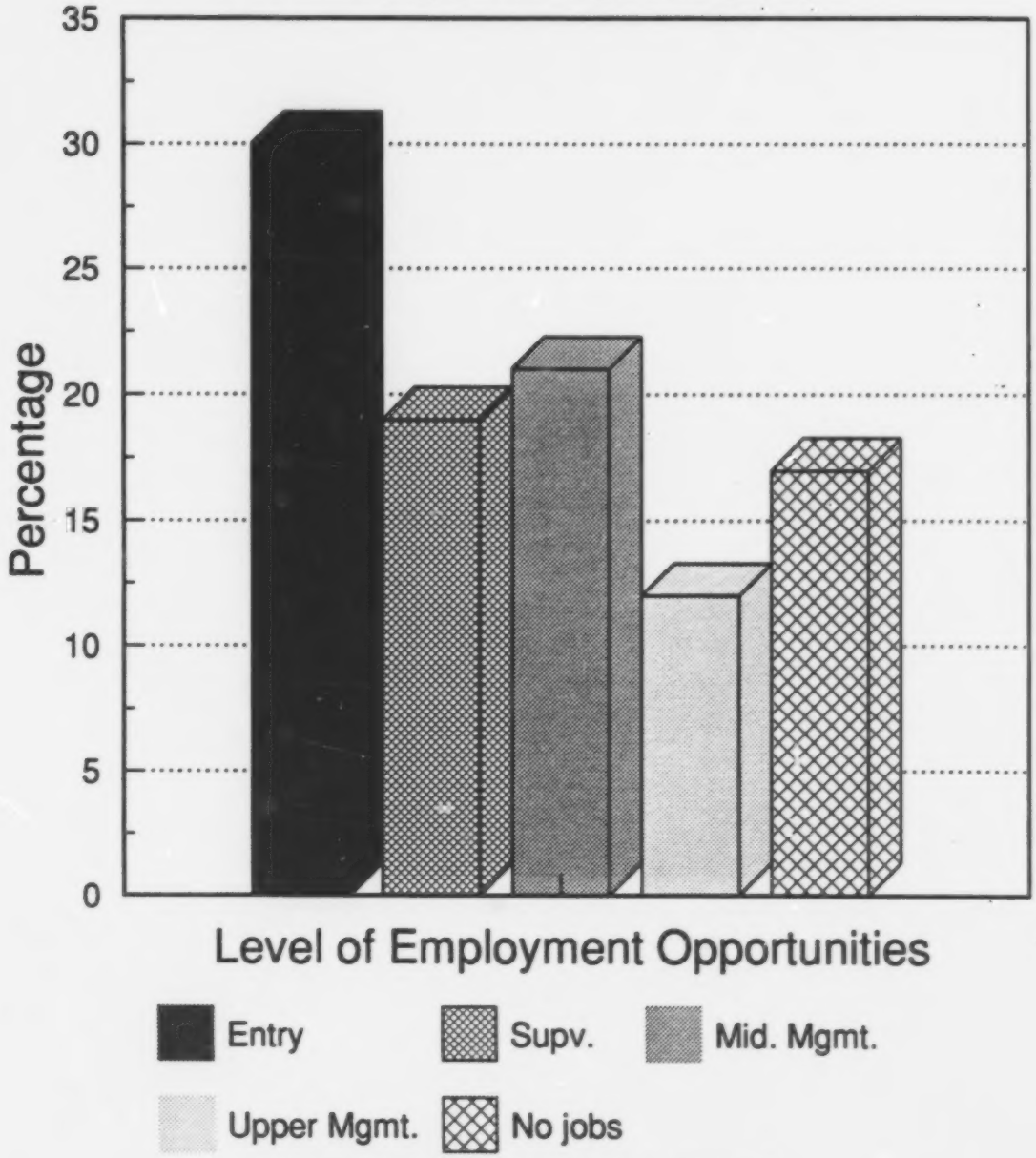


Statewide Percentage Response for Question 31, Level of Employment Opportunities for Hotel/ Motel Management (Total Responses = 119)

Chart 32

Marketing and Distribution

1992 Marketing and Management Survey

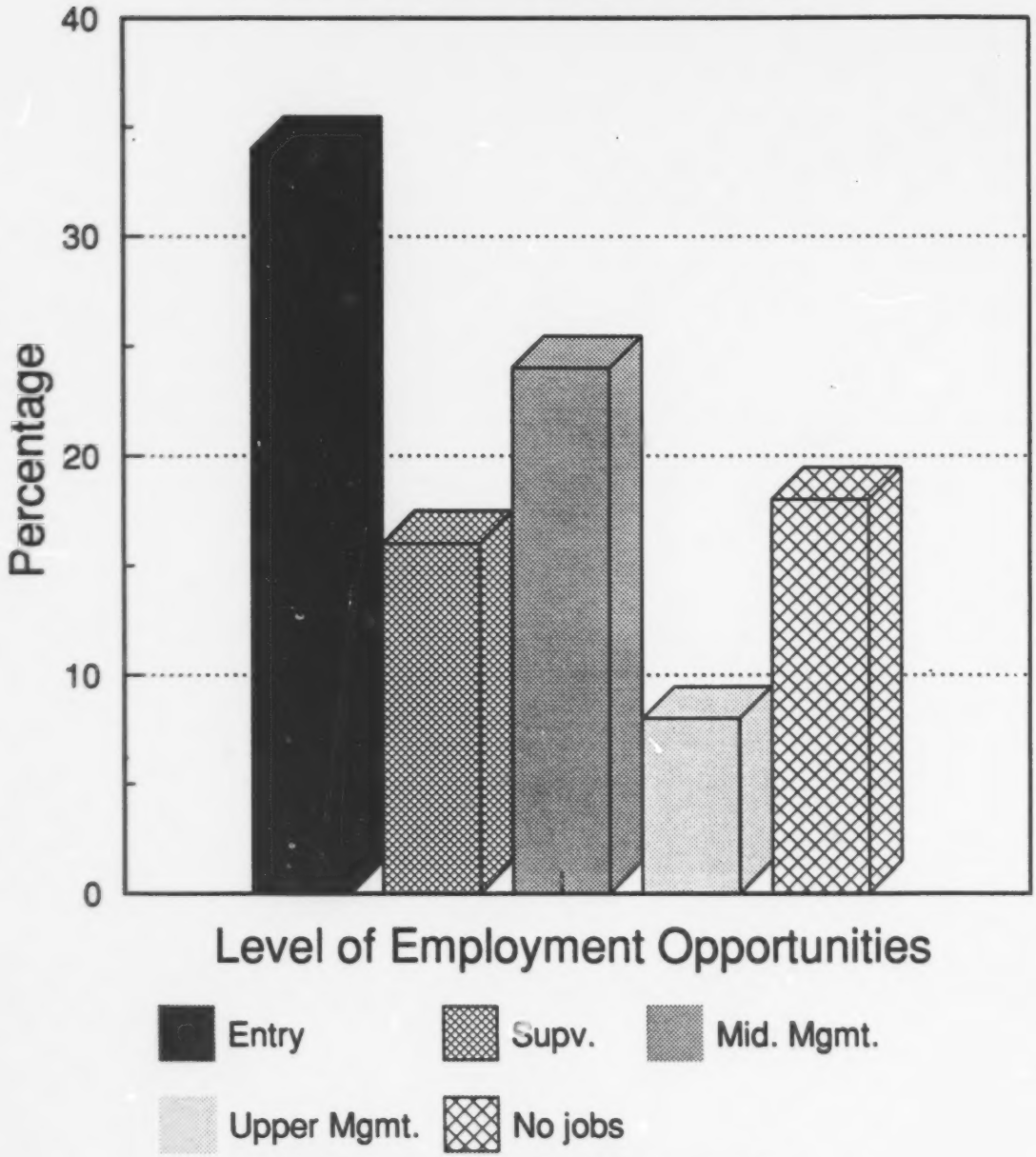


Statewide Percentage Response for Question 32, Level of Employment Opportunities for Marketing and Distribution (Total Responses = 126)

Chart 33

Advertising

1992 Marketing and Management Survey

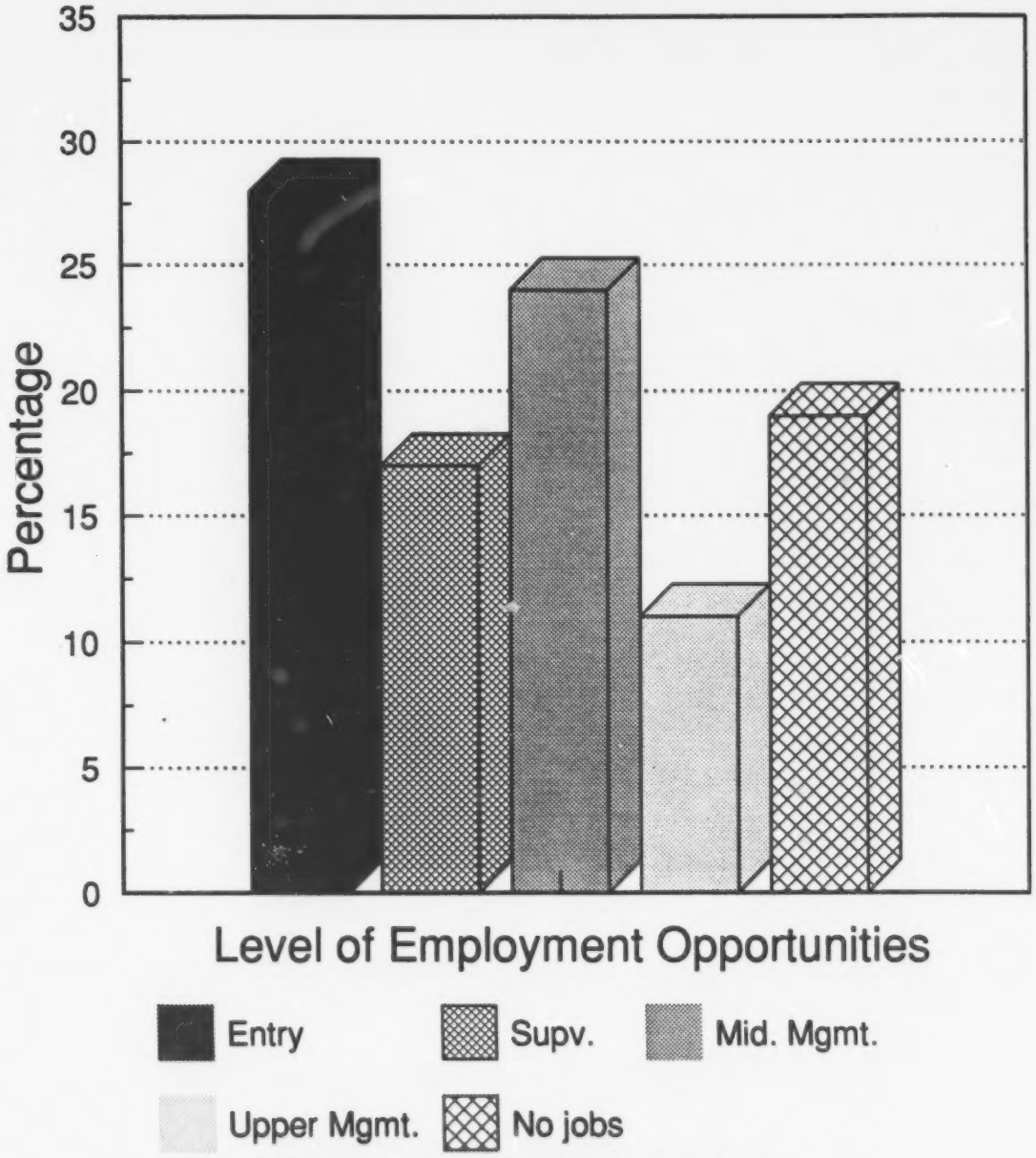


Statewide Percentage Response for Question 33,
Level of Employment Opportunities for
Advertising (Total Responses = 119)

Chart 34

Purchasing

1992 Marketing and Management Survey

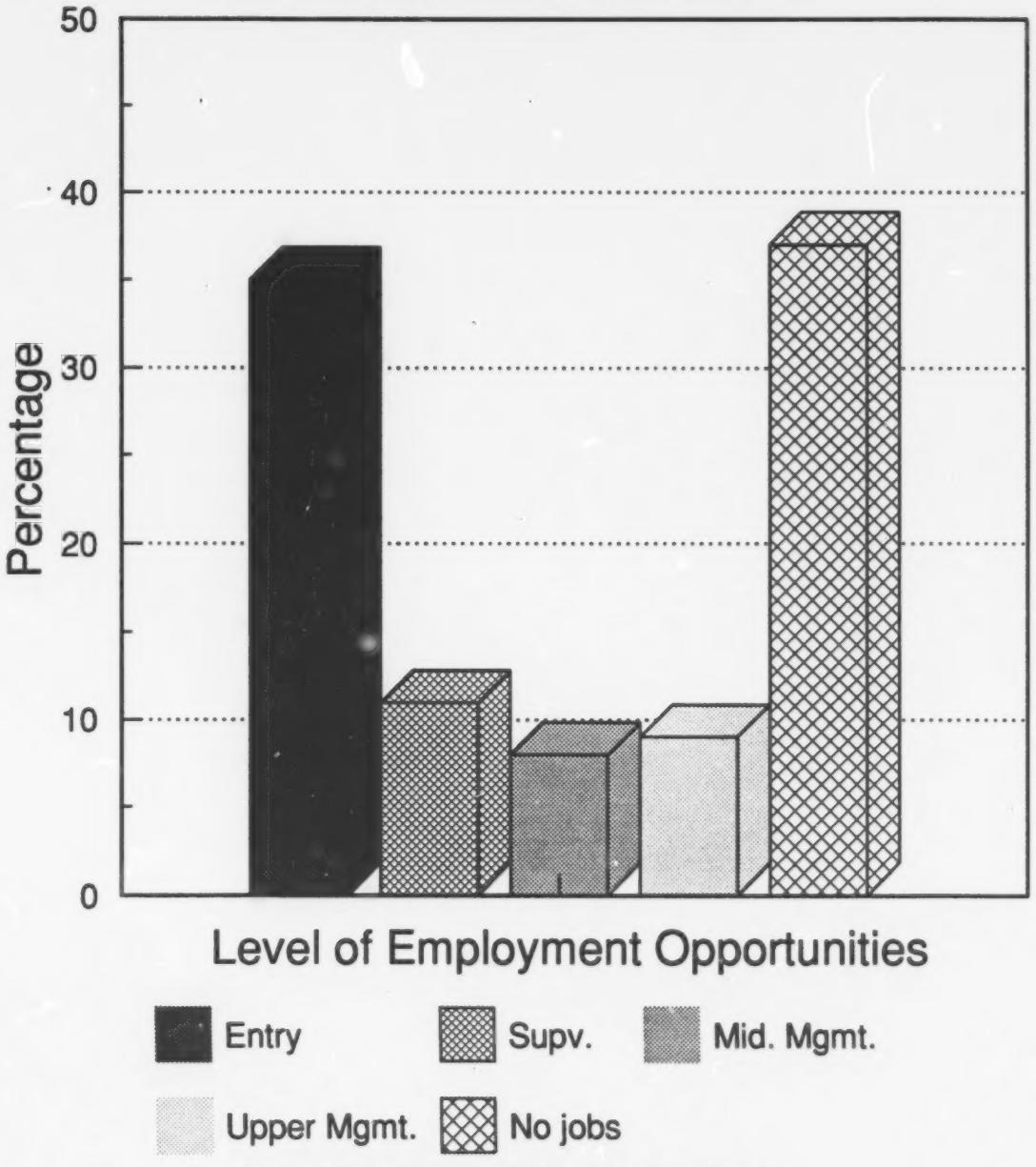


Statewide Percentage Response for Question 34,
Level of Employment Opportunities for
Purchasing (Total Responses = 120)

Chart 35

Apparel and Accessories

1992 Marketing and Management Survey

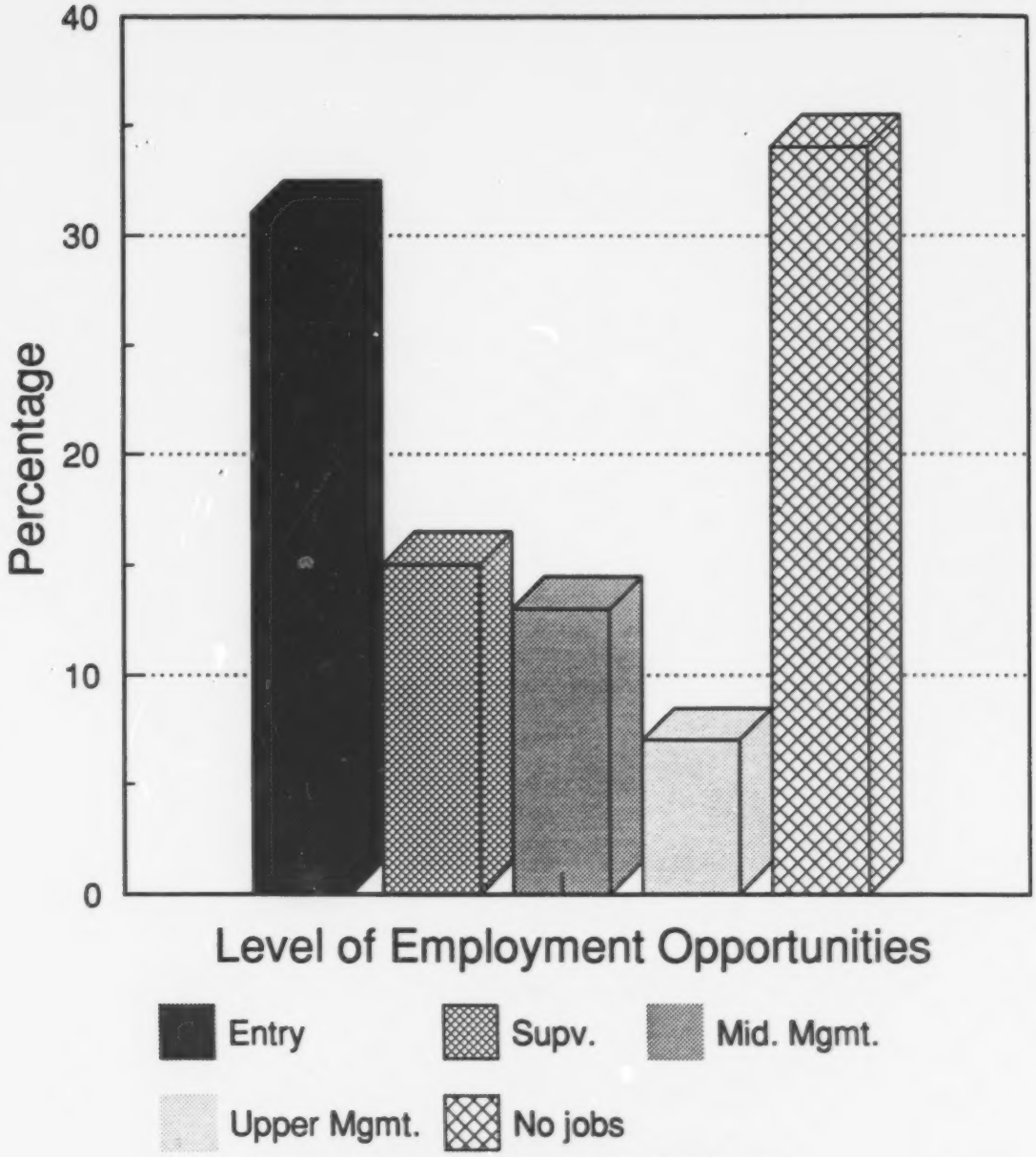


Statewide Percentage Response for Question 35, Level of Employment Opportunities for Apparel and Accessories (Total Responses = 112)

Chart 36

Food (Wholesale and Retail)

1992 Marketing and Management Survey

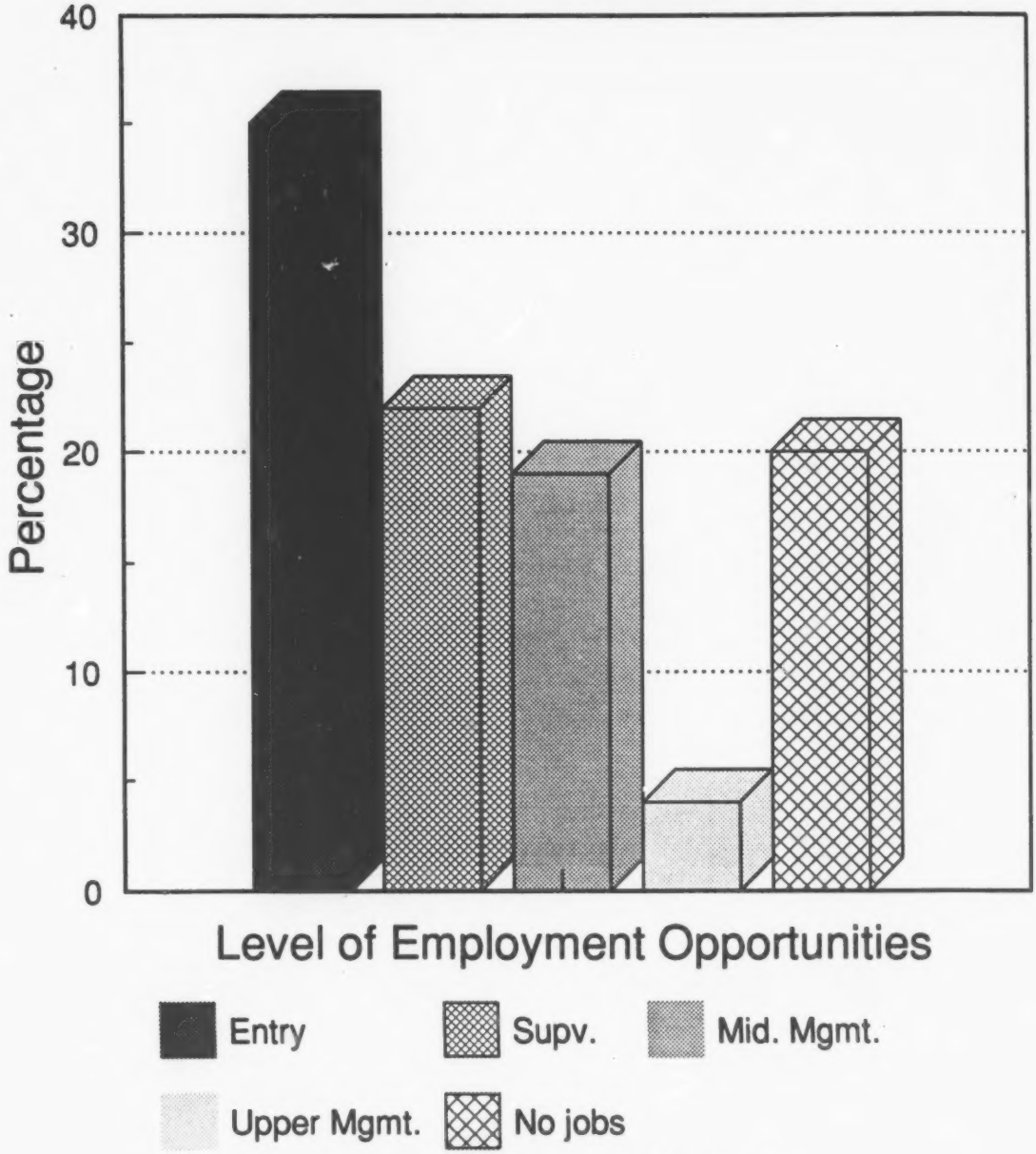


Statewide Percentage Response for Question 36,
Level of Employment Opportunities for
Food (Total Responses = 118)

Chart 37

Merchandising (Including Sales)

1992 Marketing and Management Survey

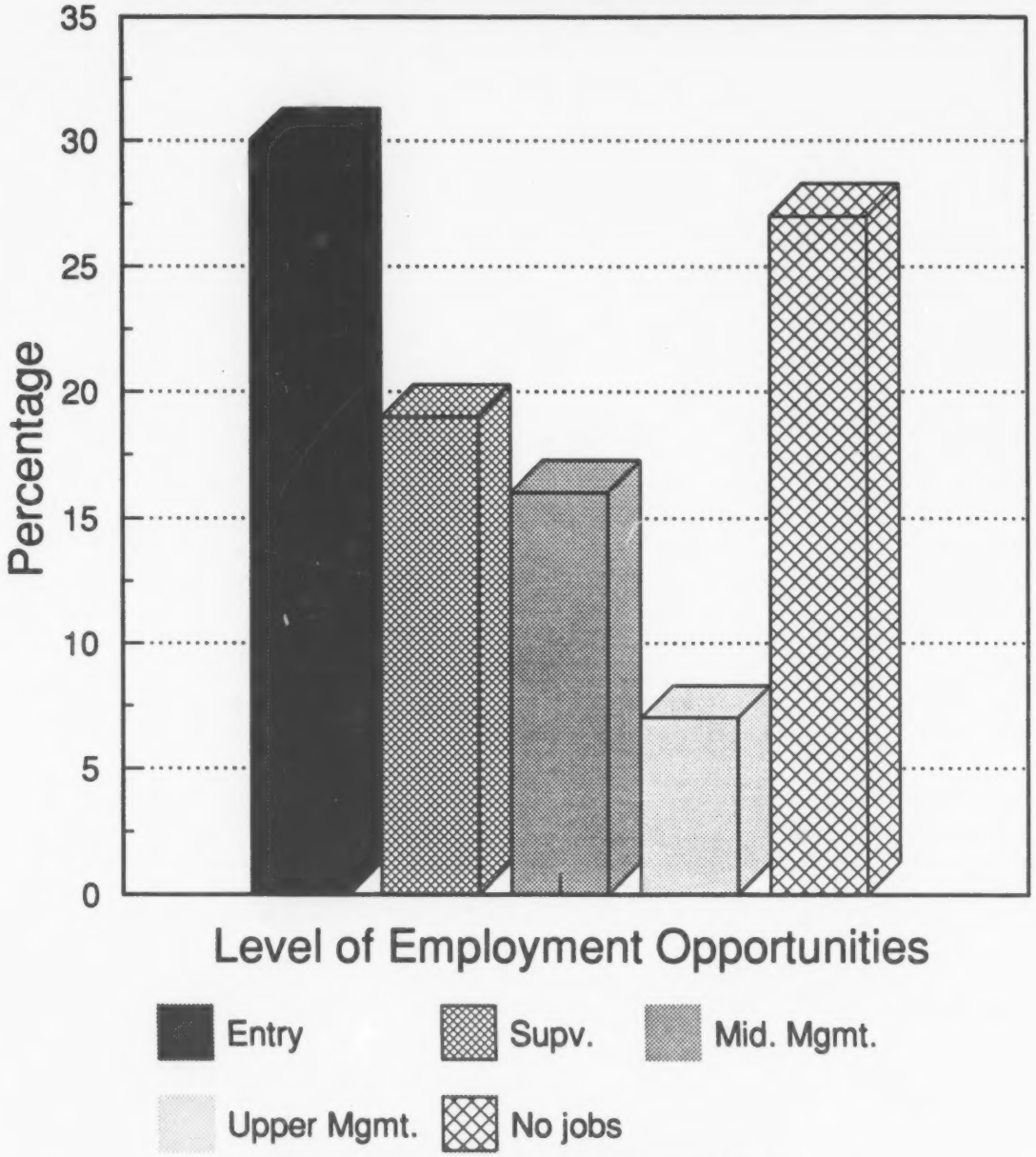


Statewide Percentage Response for Question 37,
Level of Employment Opportunities for
Merchandising (Total Responses = 122)

Chart 38

Transportation and Materials Moving

1992 Marketing and Management Survey

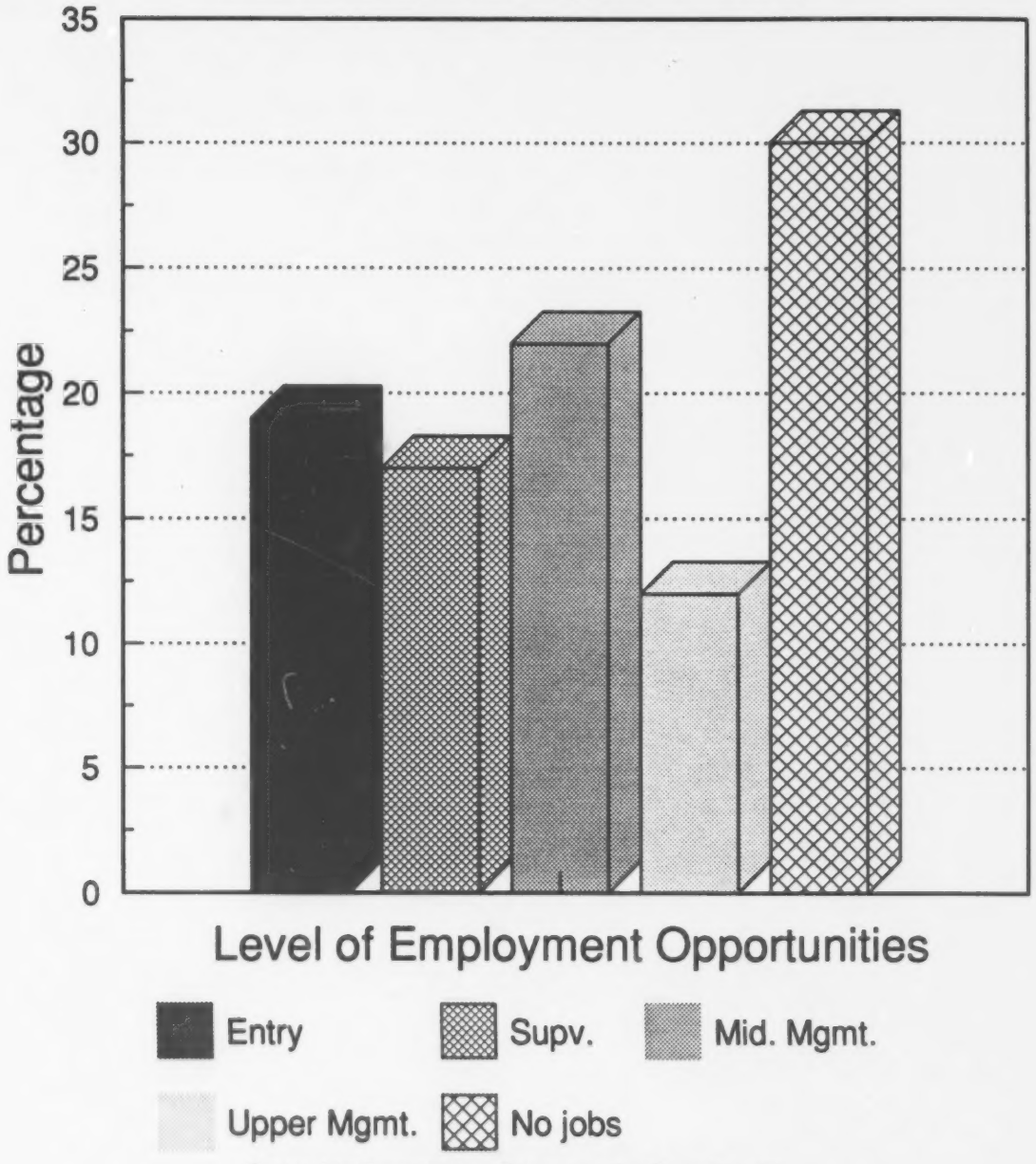


Statewide Percentage Response for Question 38, Level of Employment Opportunities for Transportation and Matls. Moving (Total Responses = 120)

Chart 39

International Trade

1992 Marketing and Management Survey

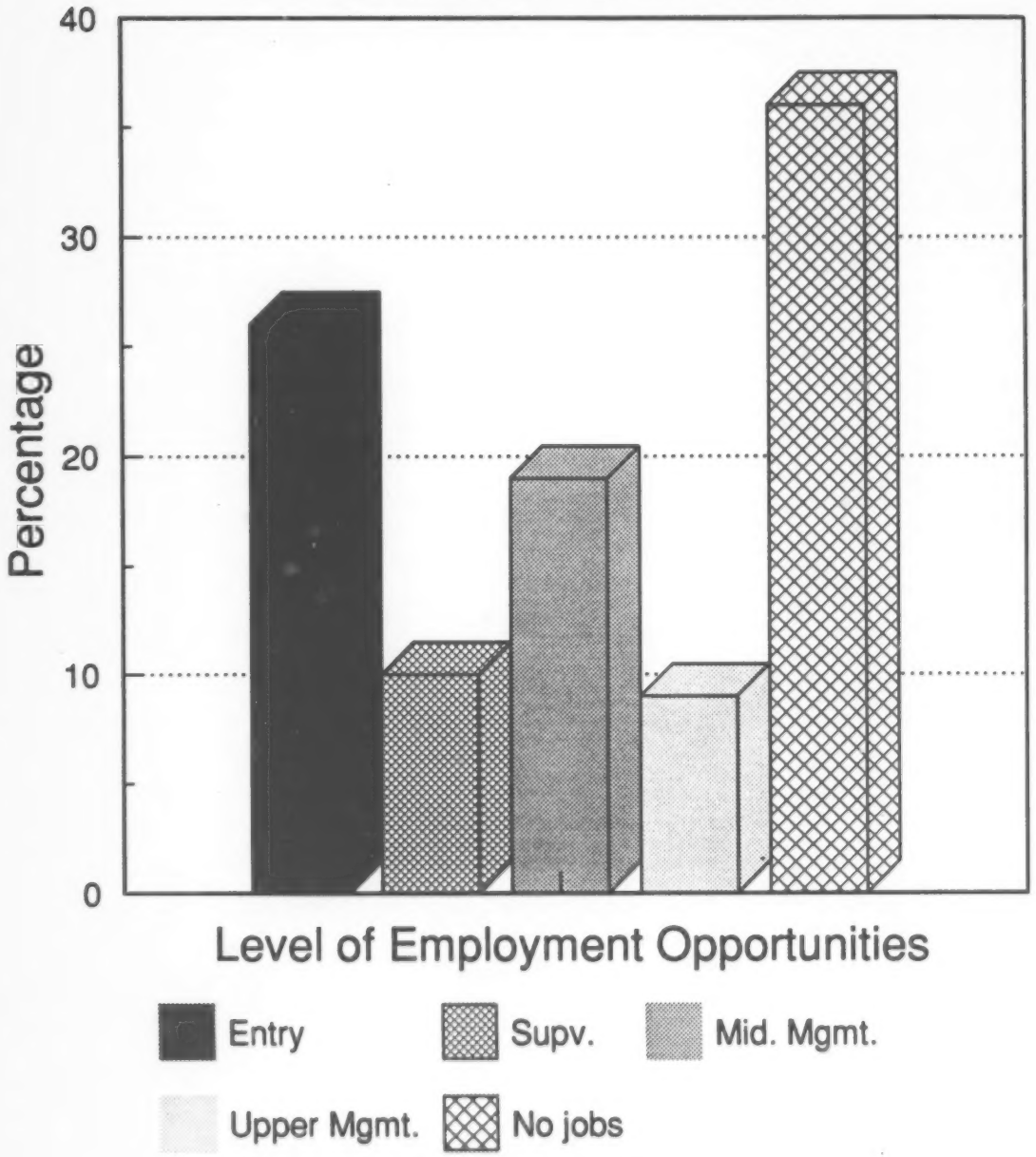


Statewide Percentage Response for Question 39,
Level of Employment Opportunities for
International Trade (Total Responses = 124)

Chart 40

Traffic Management

1992 Marketing and Management Survey

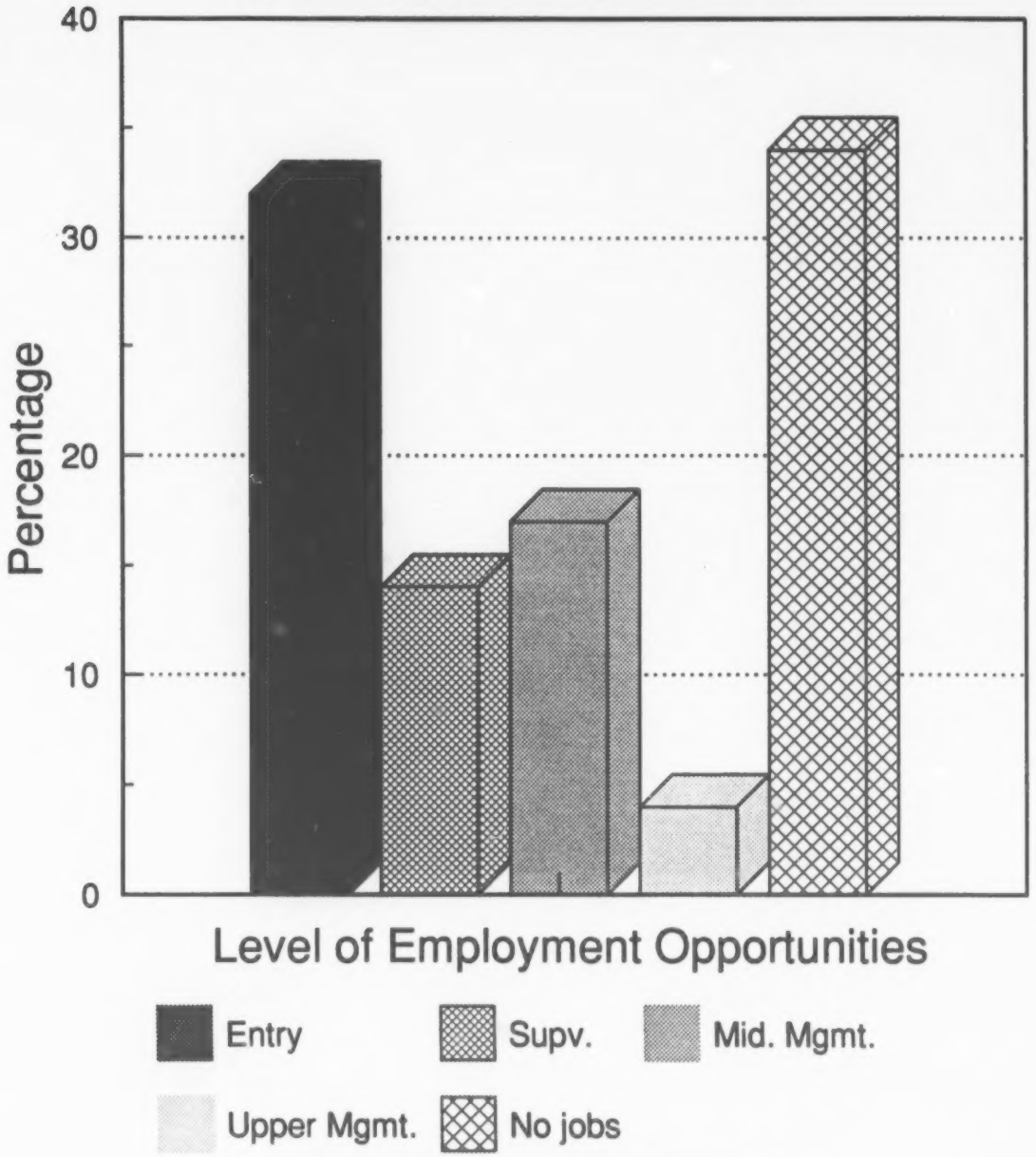


Statewide Percentage Response for Question 40,
Level of Employment Opportunities for
Traffic Management (Total Responses = 117)

Chart 41

Material Support

1992 Marketing and Management Survey

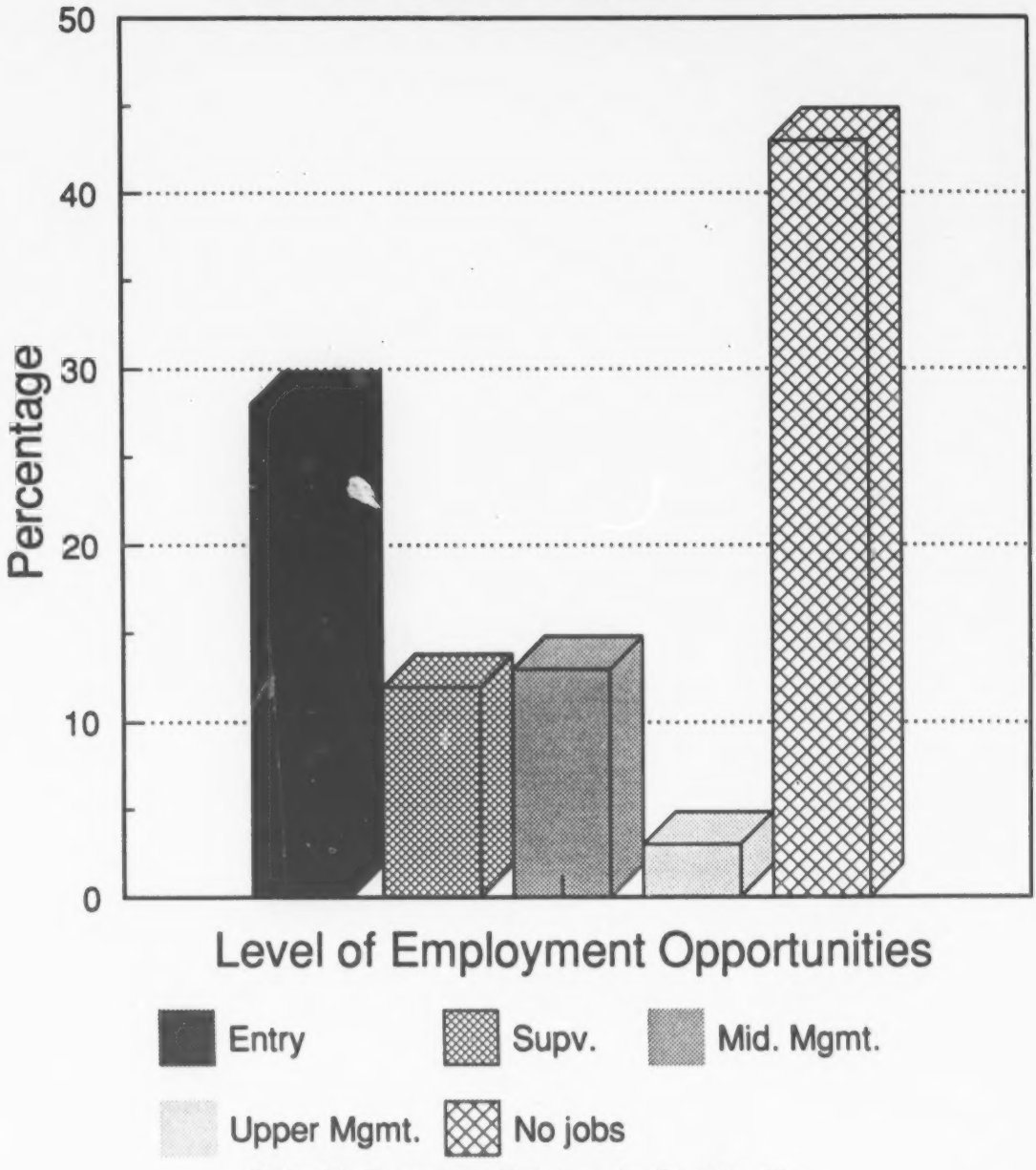


Statewide Percentage Response for Question 41
Level of Employment Opportunities for
Material Support (Total Responses = 121)

Chart 42

Airline Ground Crew

1992 Marketing and Management Survey

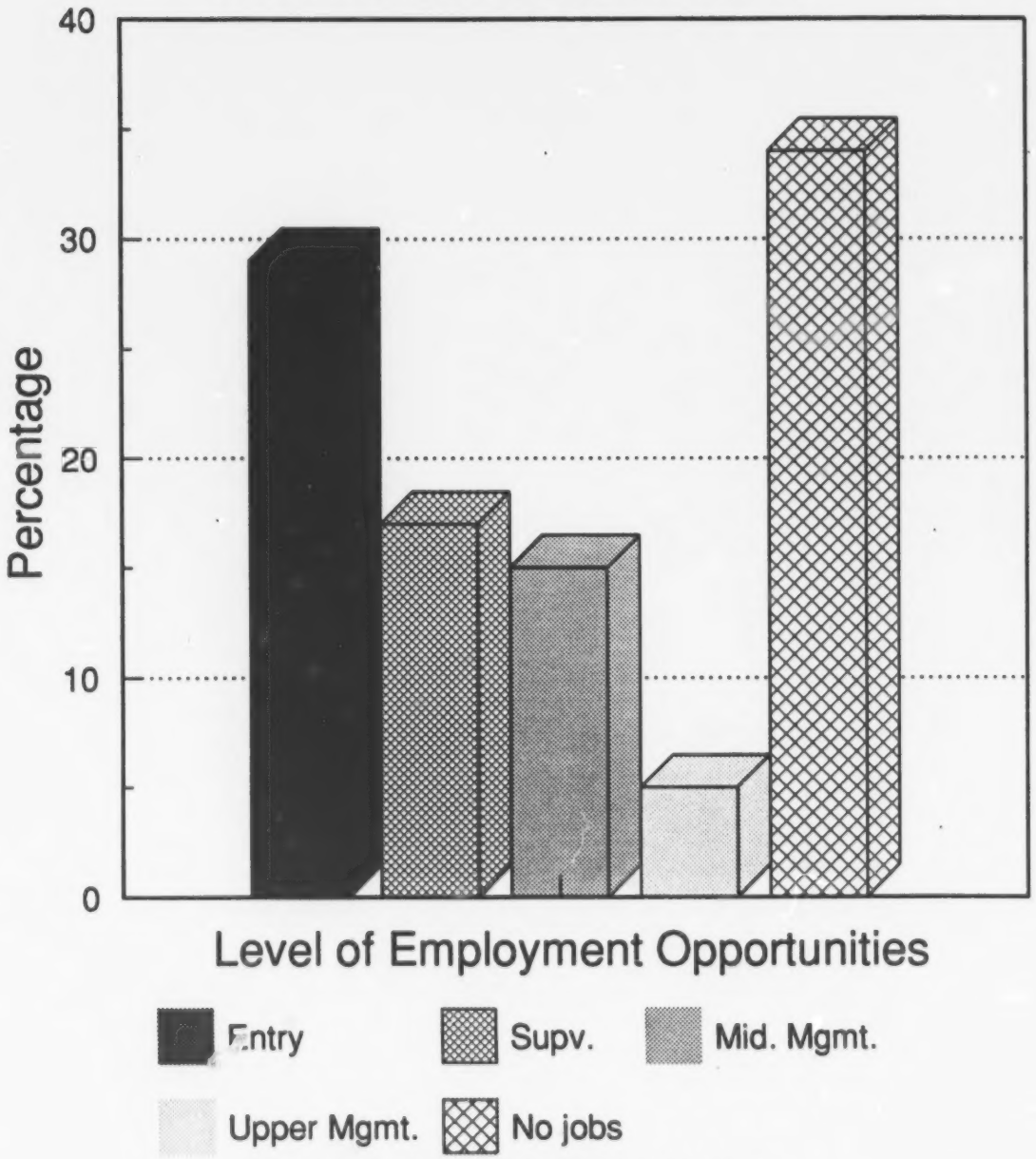


Statewide Percentage Response for Question 42,
Level of Employment Opportunities for
Airline Ground Crew (Total Responses = 123)

Chart 43

Real Estate

1992 Marketing and Management Survey

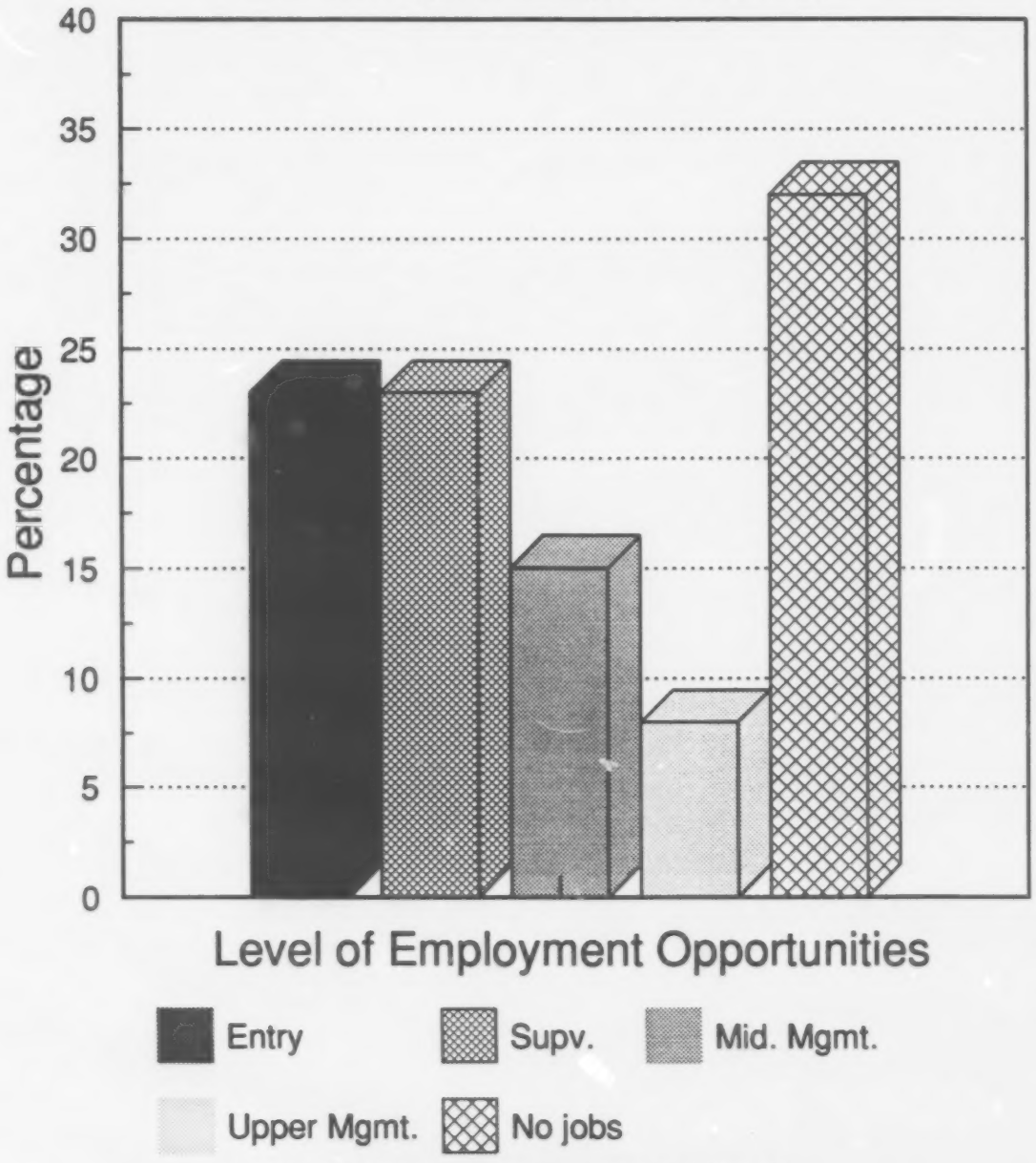


Statewide Percentage Response for Question 43,
Level of Employment Opportunities for
Real Estate (Total Responses = 120)

Chart 44

Insurance

1992 Marketing and Management Survey

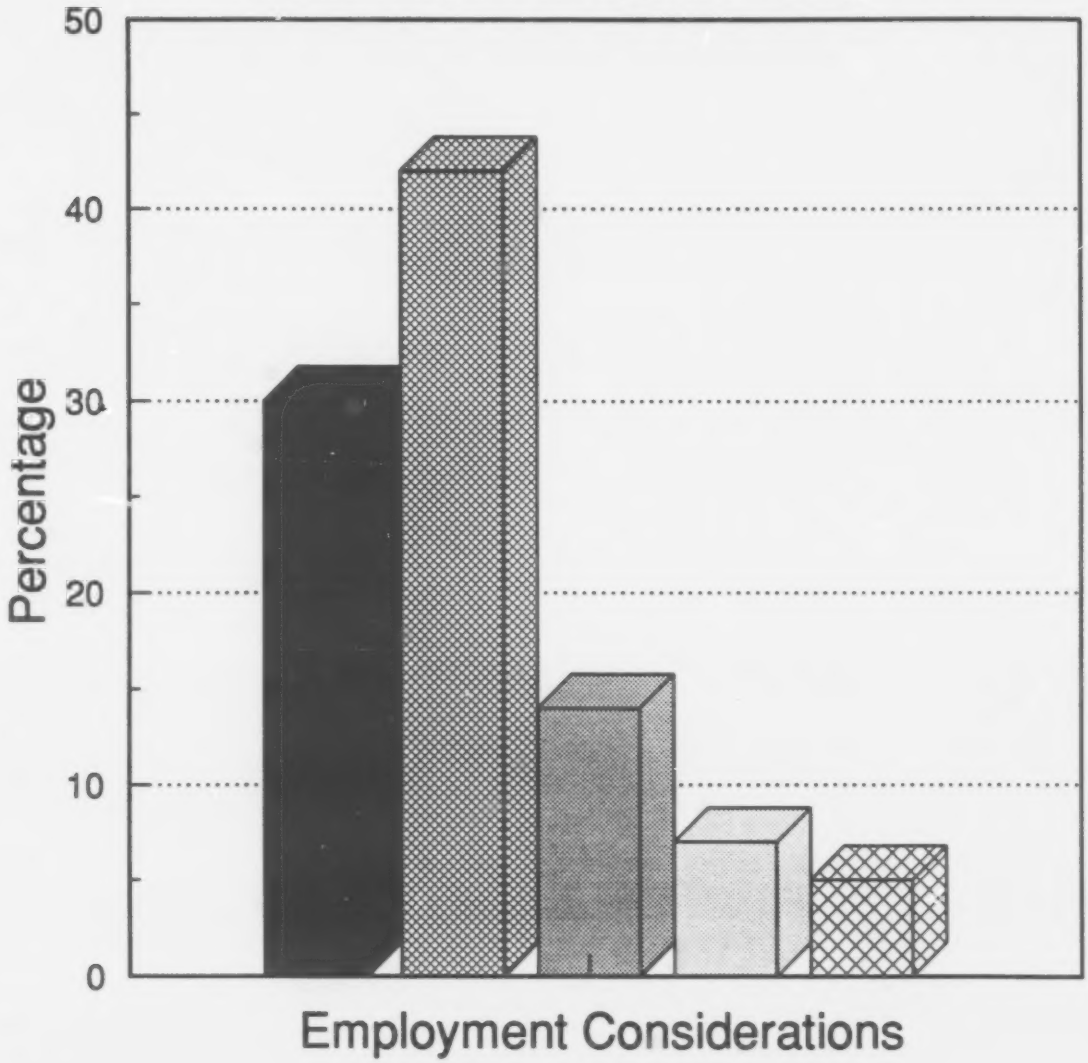


Statewide Percentage Response for Question 44
Level of Employment Opportunities for
Insurance (Total Responses = 114)

Chart 45

Primary Considerations for Employment

1992 Marketing and Management Survey

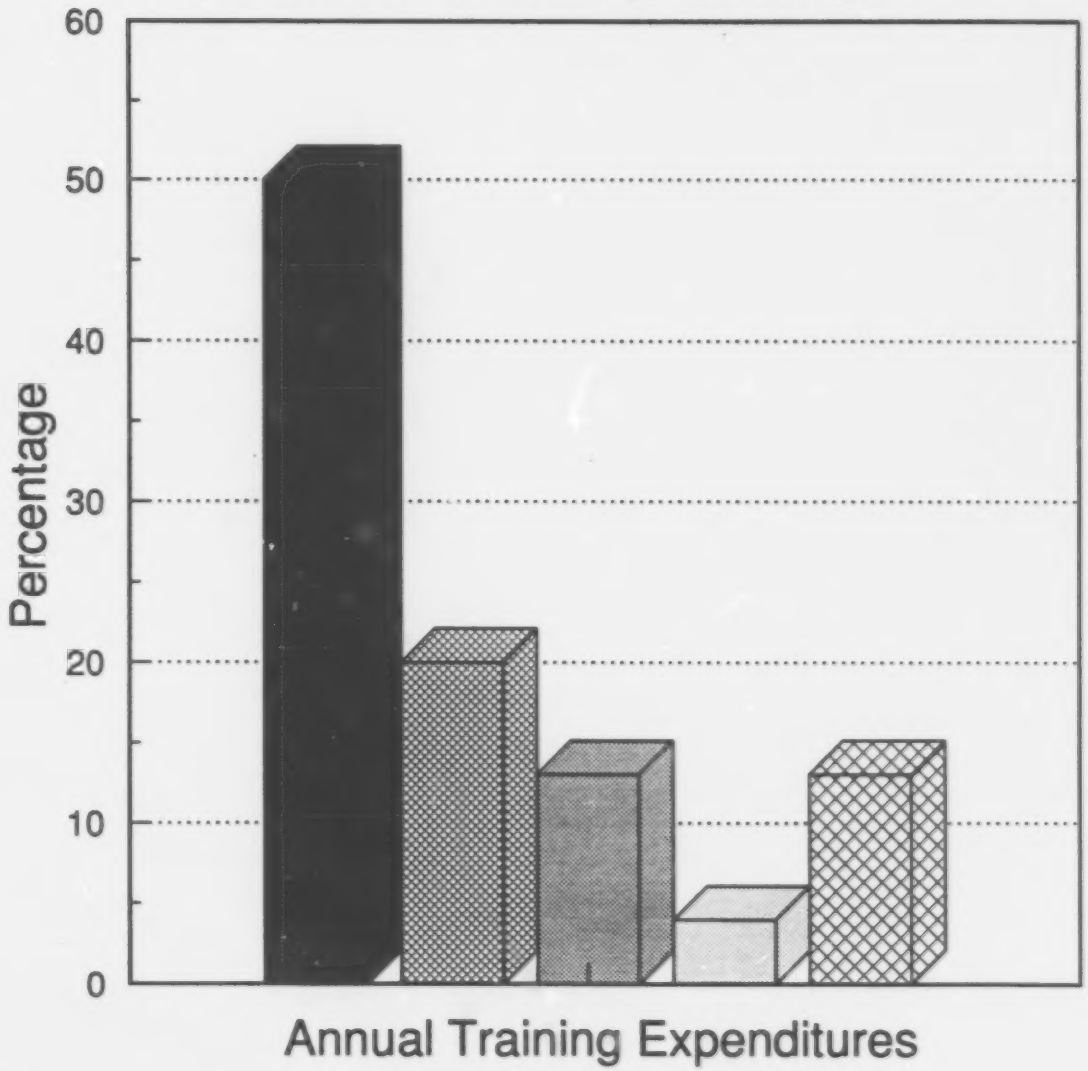


Statewide Percentage Responses to
Questions 67 - 71

Chart 46

Annual Expenditures for Training

1992 Marketing and Management Survey

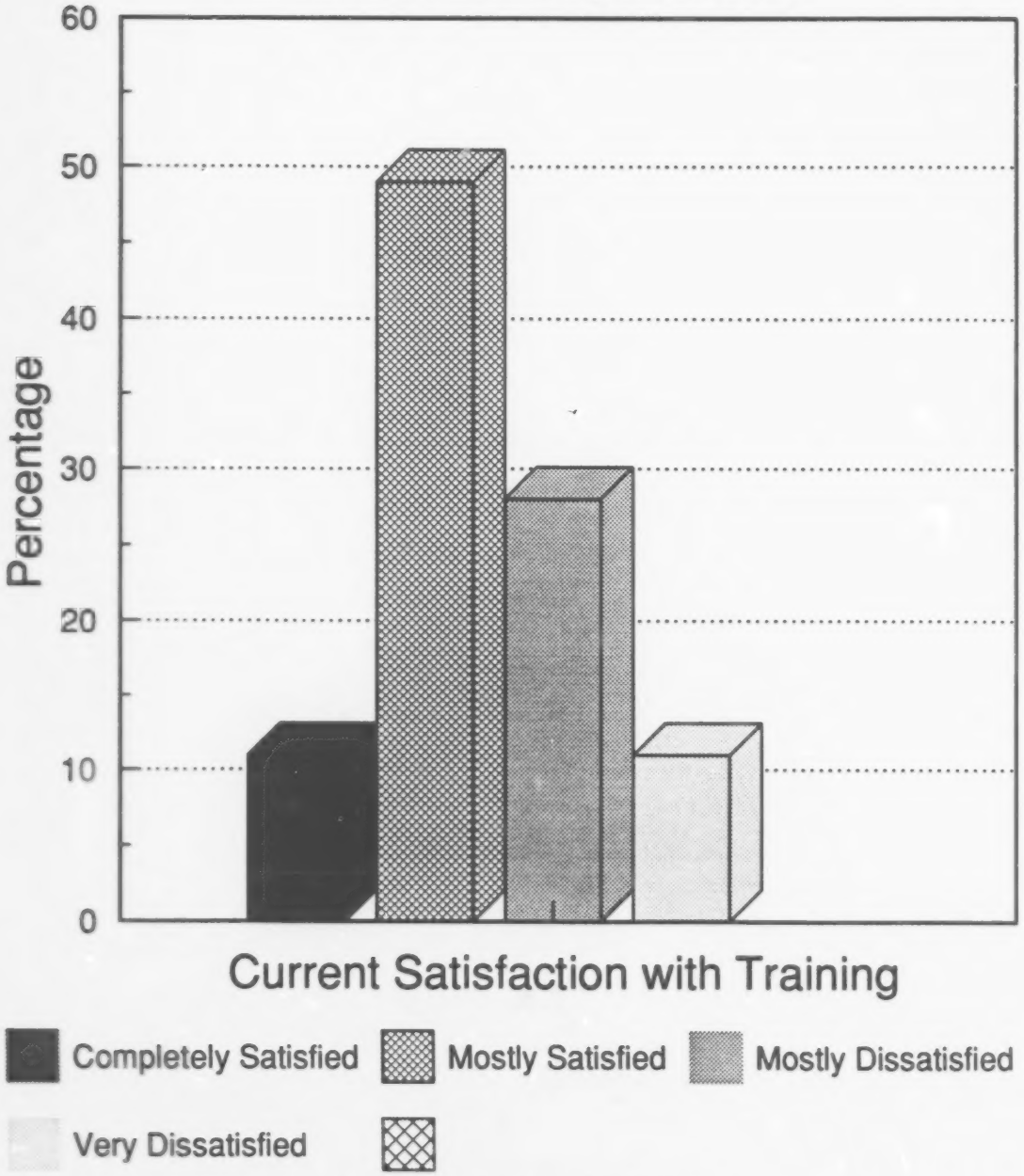


Statewide Percentage Response
Question 72

Chart 47

Satisfaction with Current Training

1992 Marketing and Management Survey

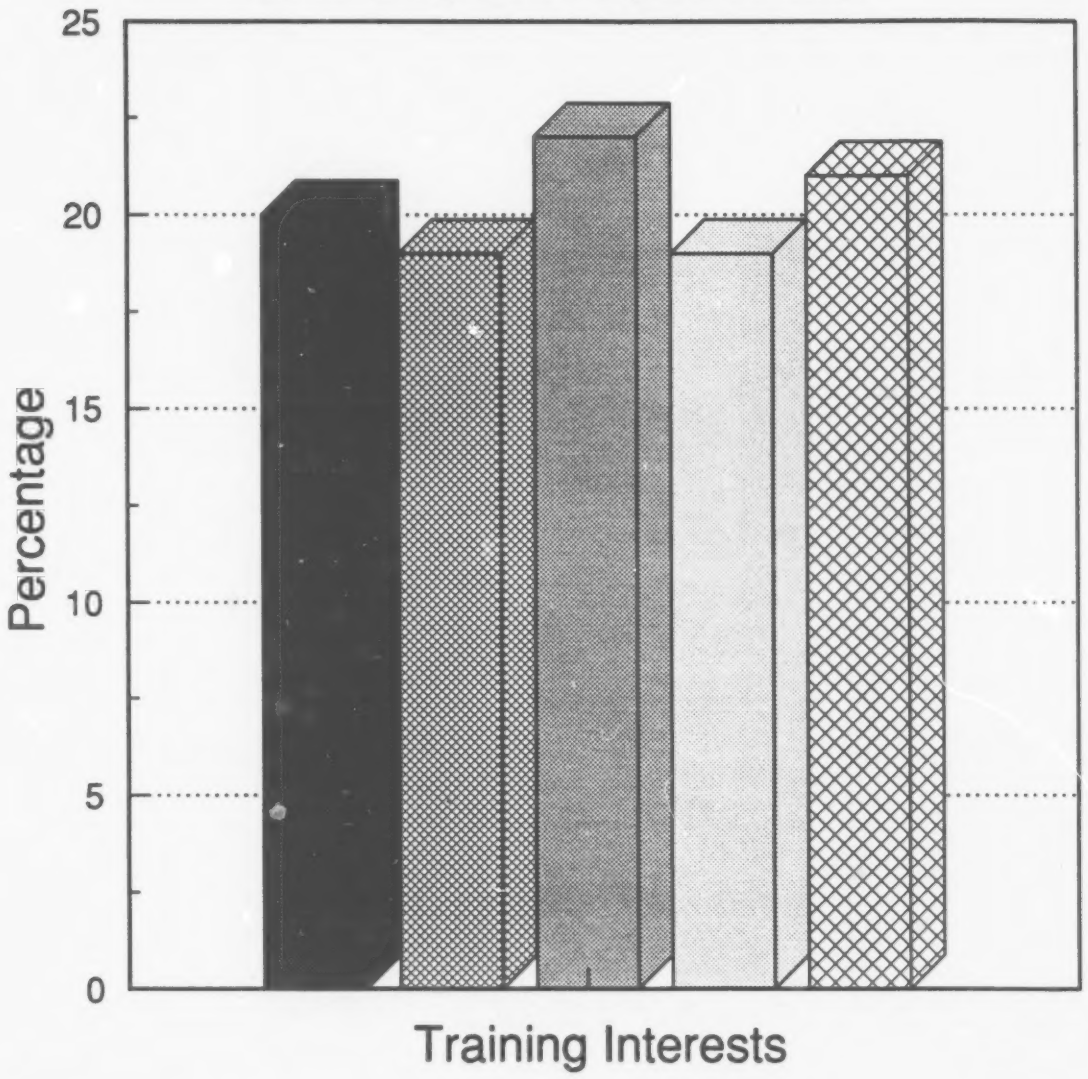


Statewide Percentage Response
Question No. 73

Chart 48

Training Interests with Community Colleges

1992 Marketing and Management Survey

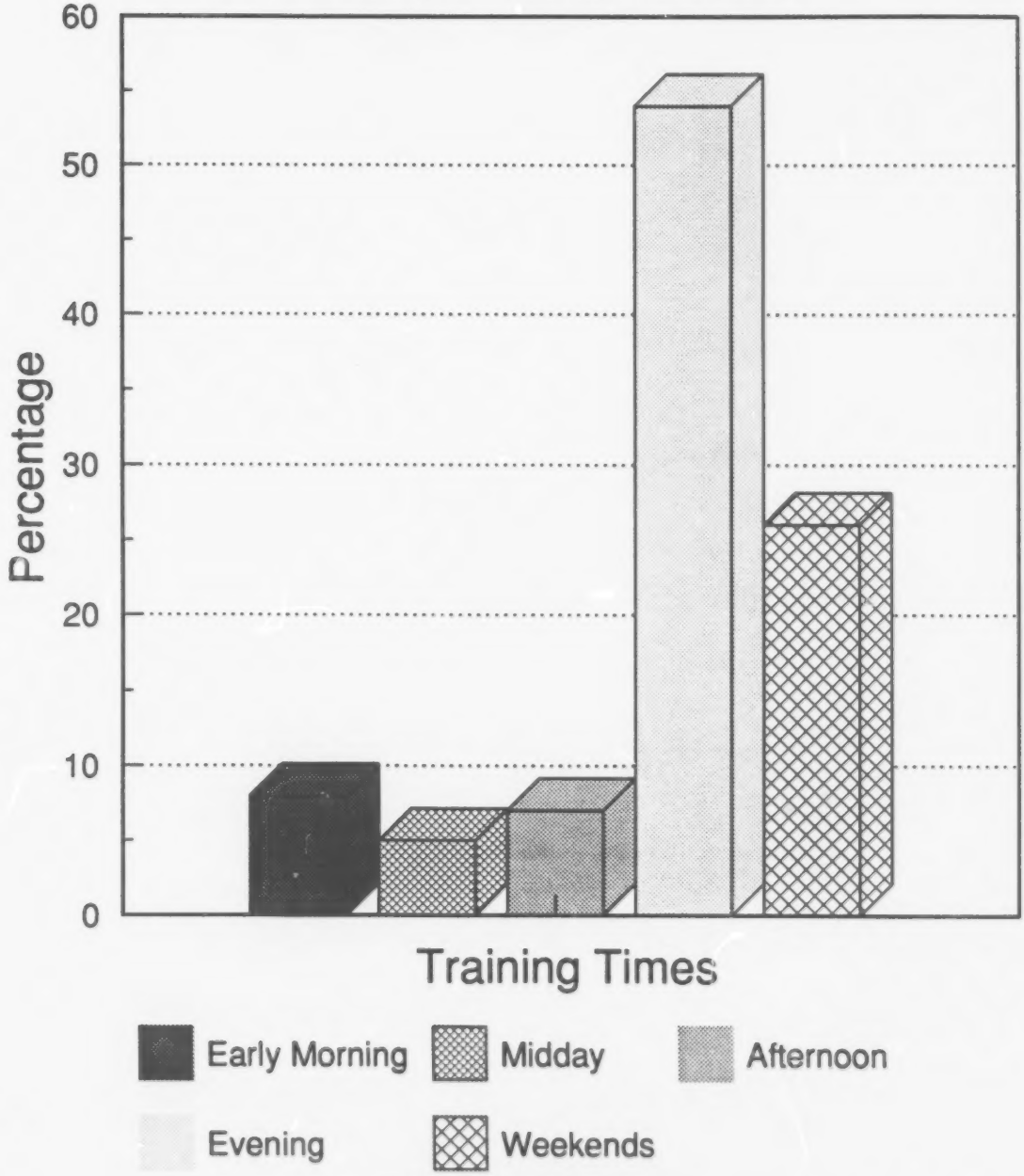


Statewide Percentage Response
Question No. 76

Chart 49

Preferred Training Times

1992 Marketing and Management Survey

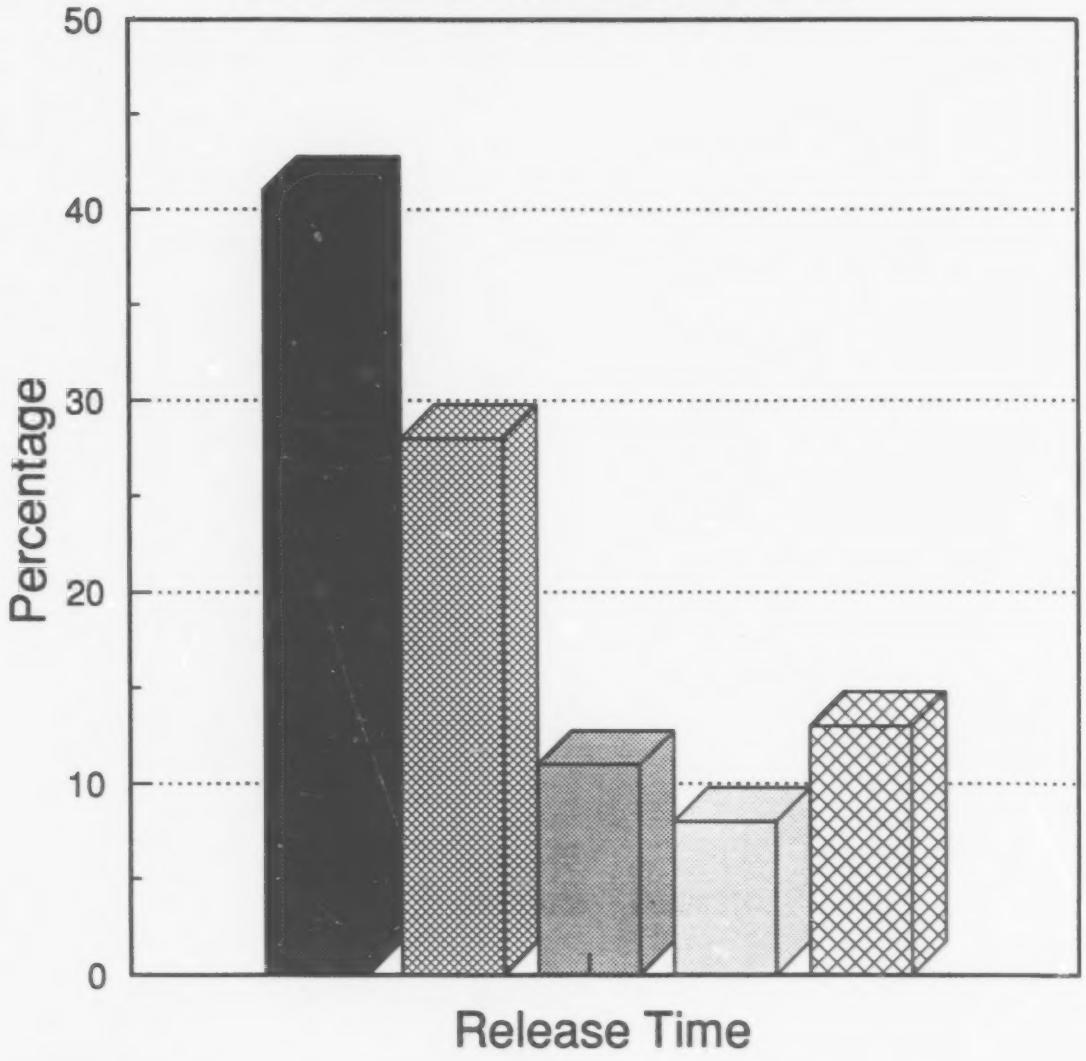


Statewide Percentage Response
Question No. 77

Chart 50

Employee Release Time for Monthly Training

1992 Marketing and Management Survey

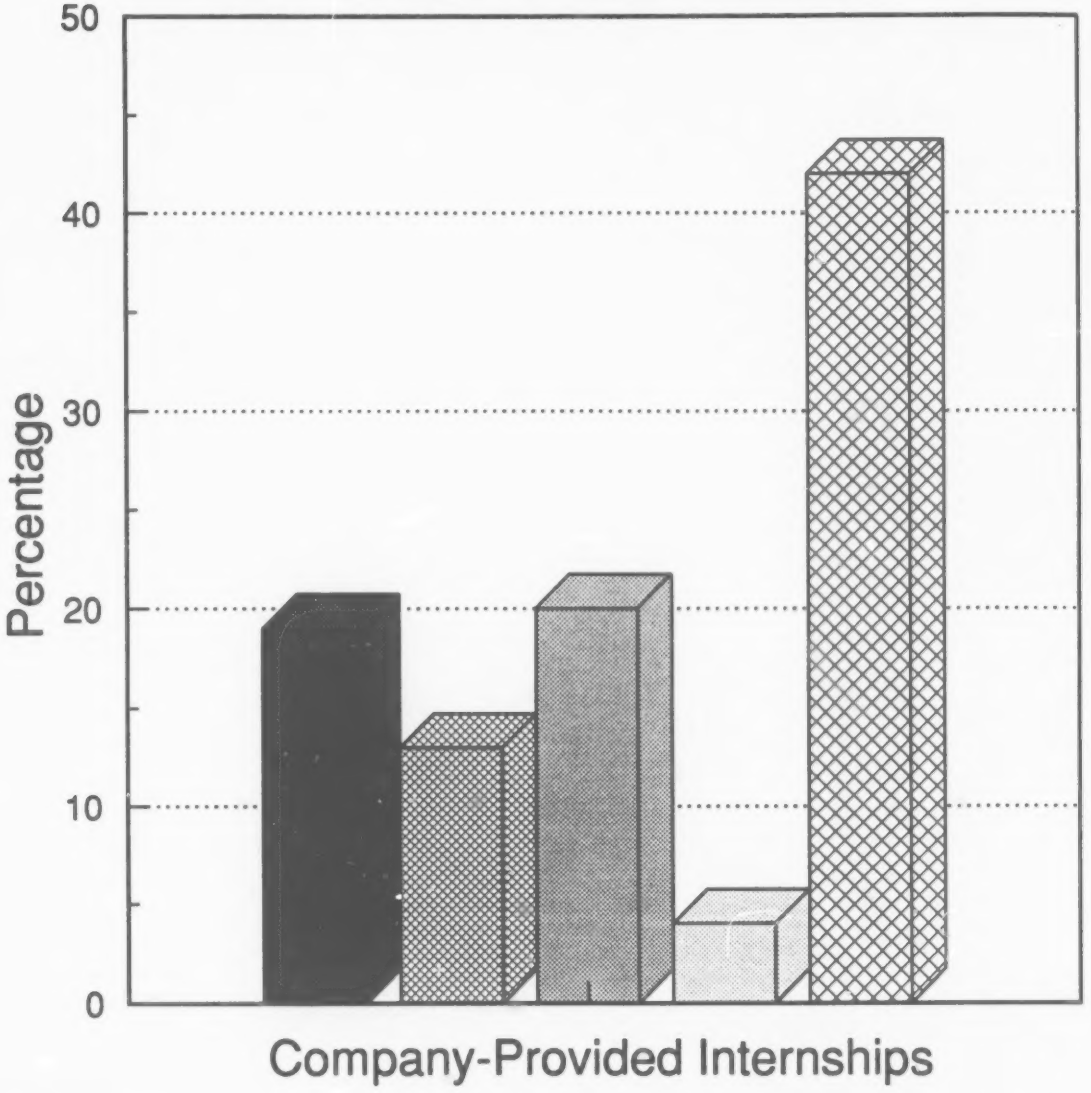


Statewide Percentage Response
Question No. 78

Chart 51

Company-Provided Internships for Students

1992 Marketing and Management Survey

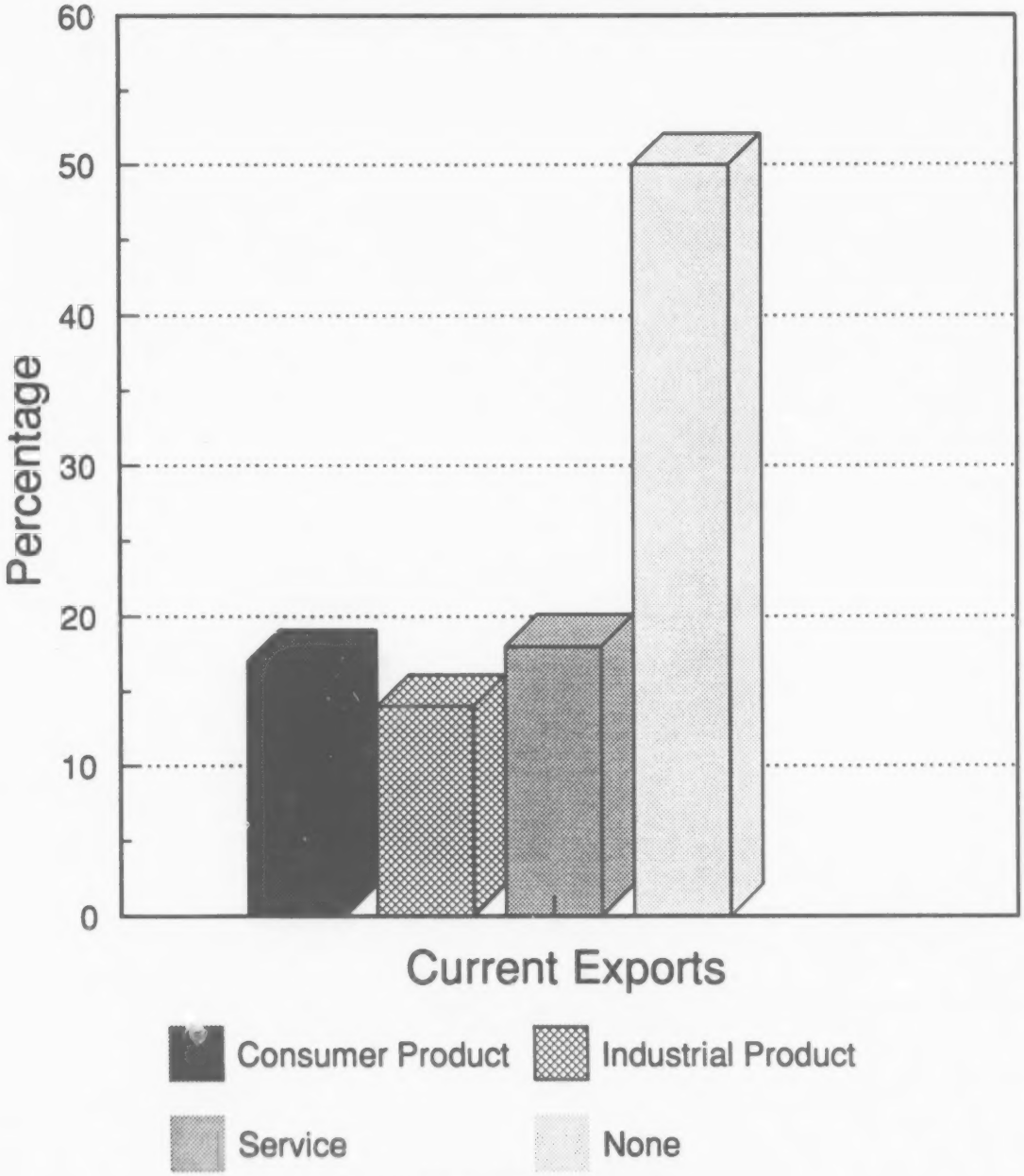


Statewide Percentage Response
Question No. 79

Chart 52

Current Exports

1992 Marketing and Management Survey

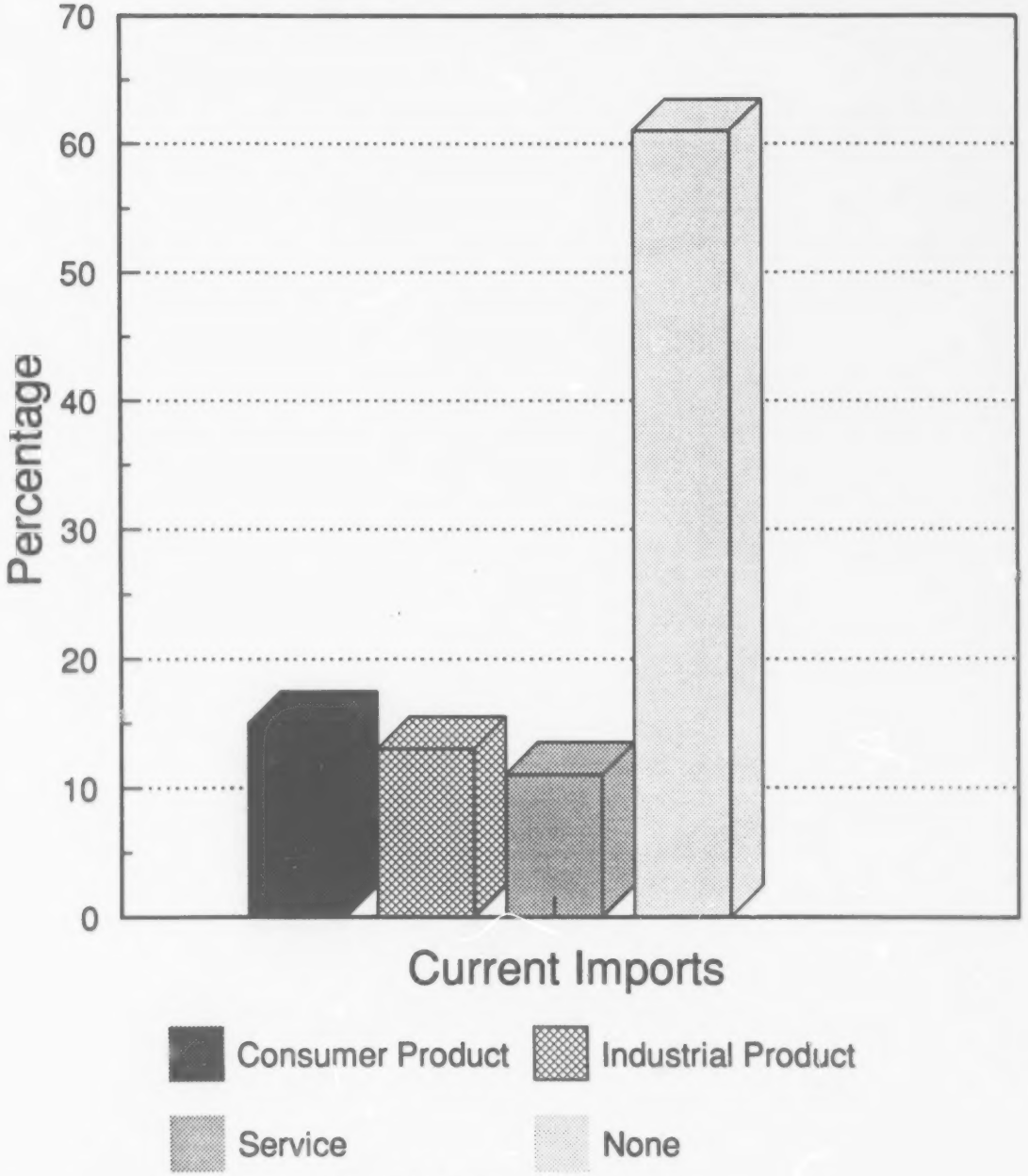


Statewide Percentage Response
Question No. 81

Chart 53

Current Imports

1992 Marketing and Management Survey

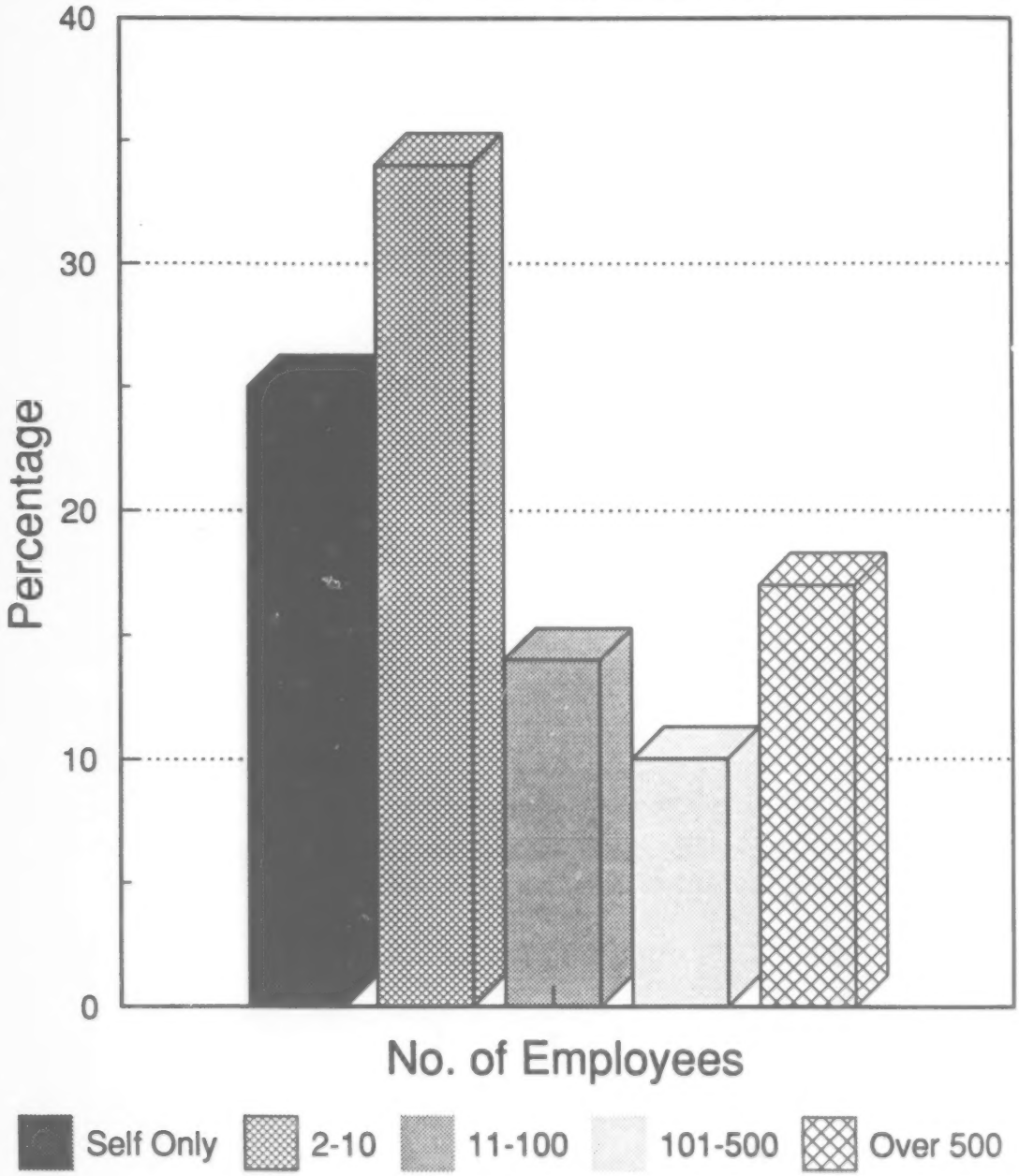


Statewide Percentage Response
Question No. 82

Chart 54

No. of Employees Working in International Trade

1992 Marketing and Management Survey

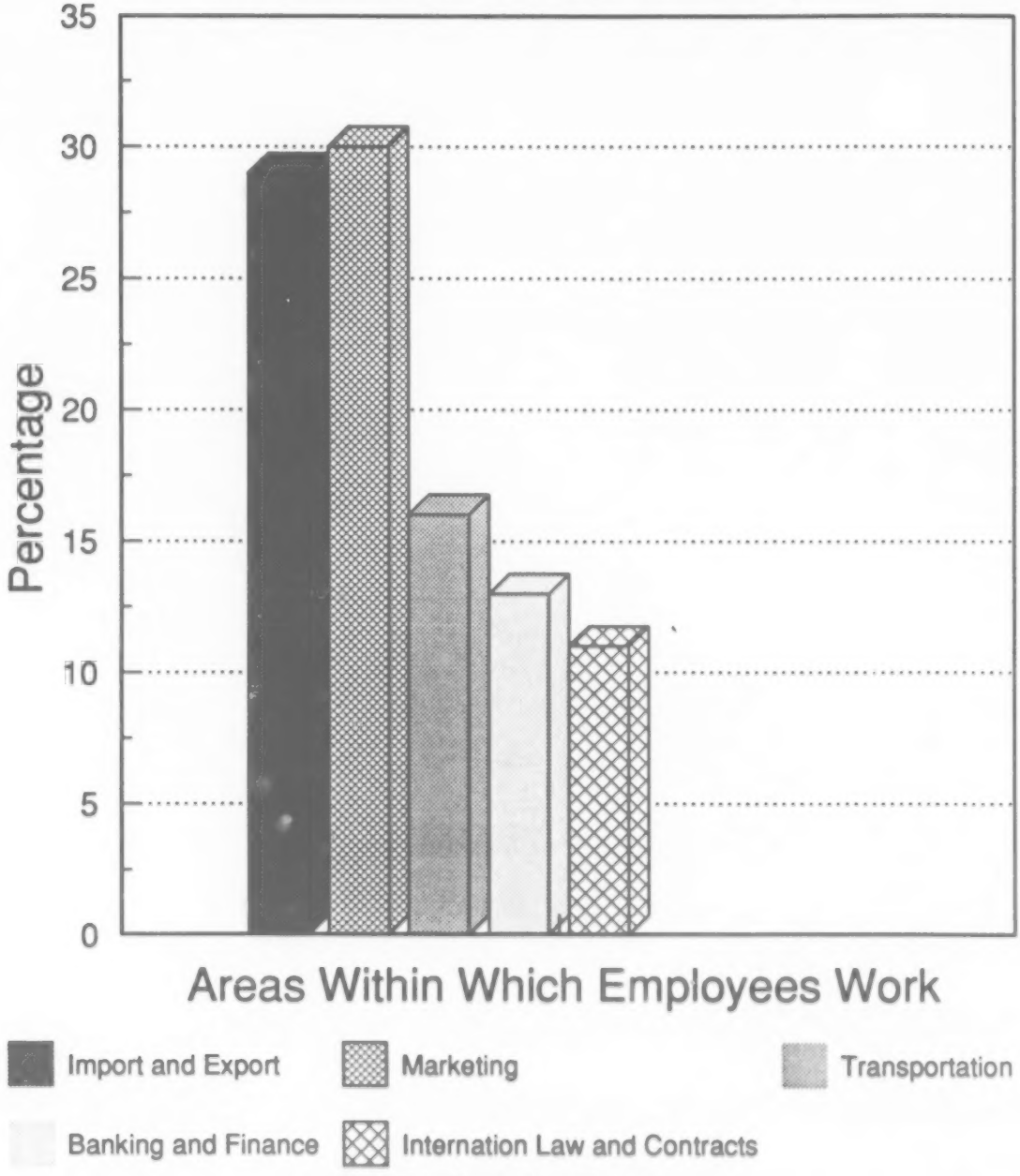


Statewide Percentage Response
Question No. 83

Chart 55

Areas of International Business

1992 Marketing and Management Survey

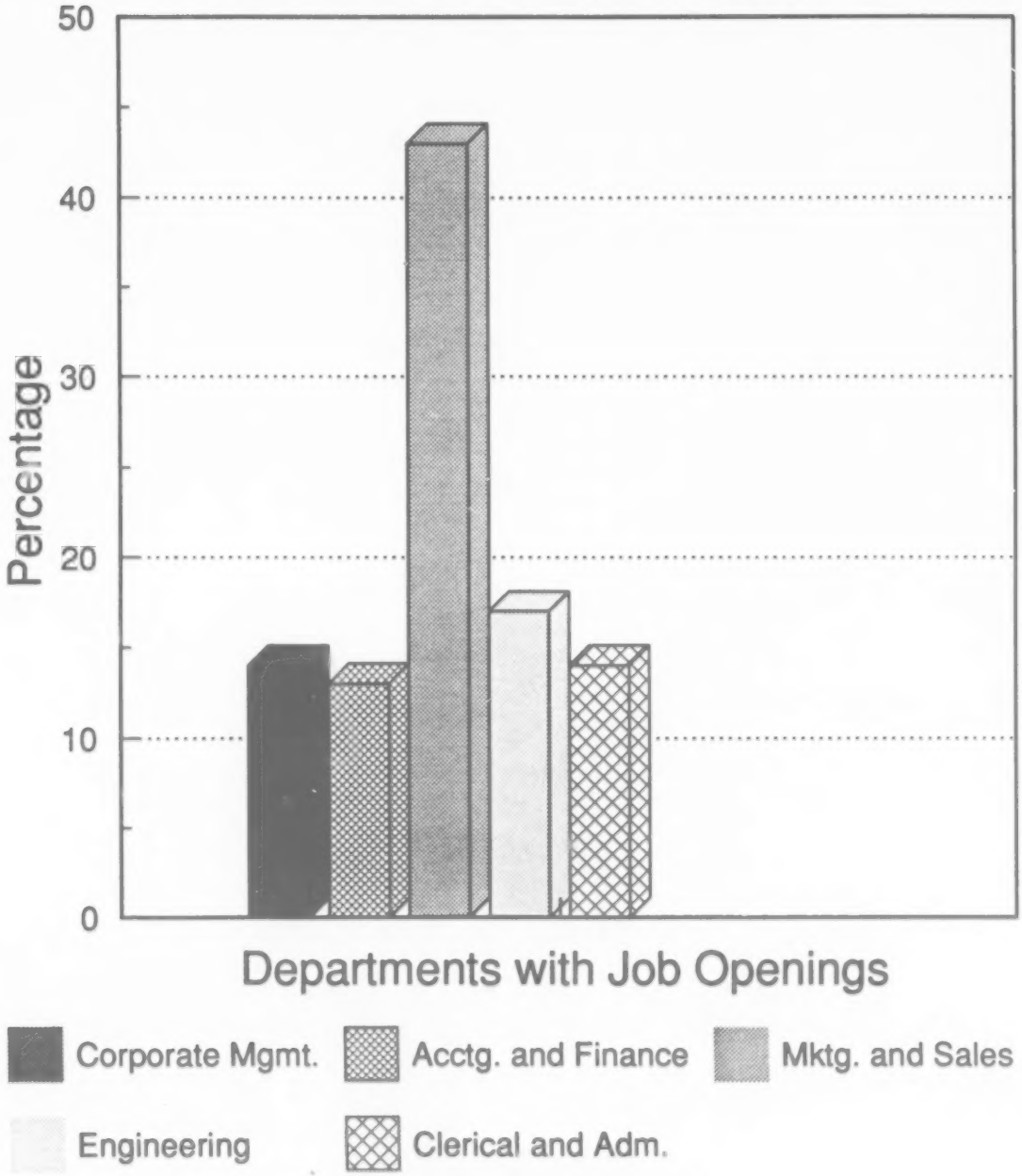


Statewide Percentage Response
Question No. 84

Chart 56

Job Openings in International Trade

1992 Marketing and Management Survey

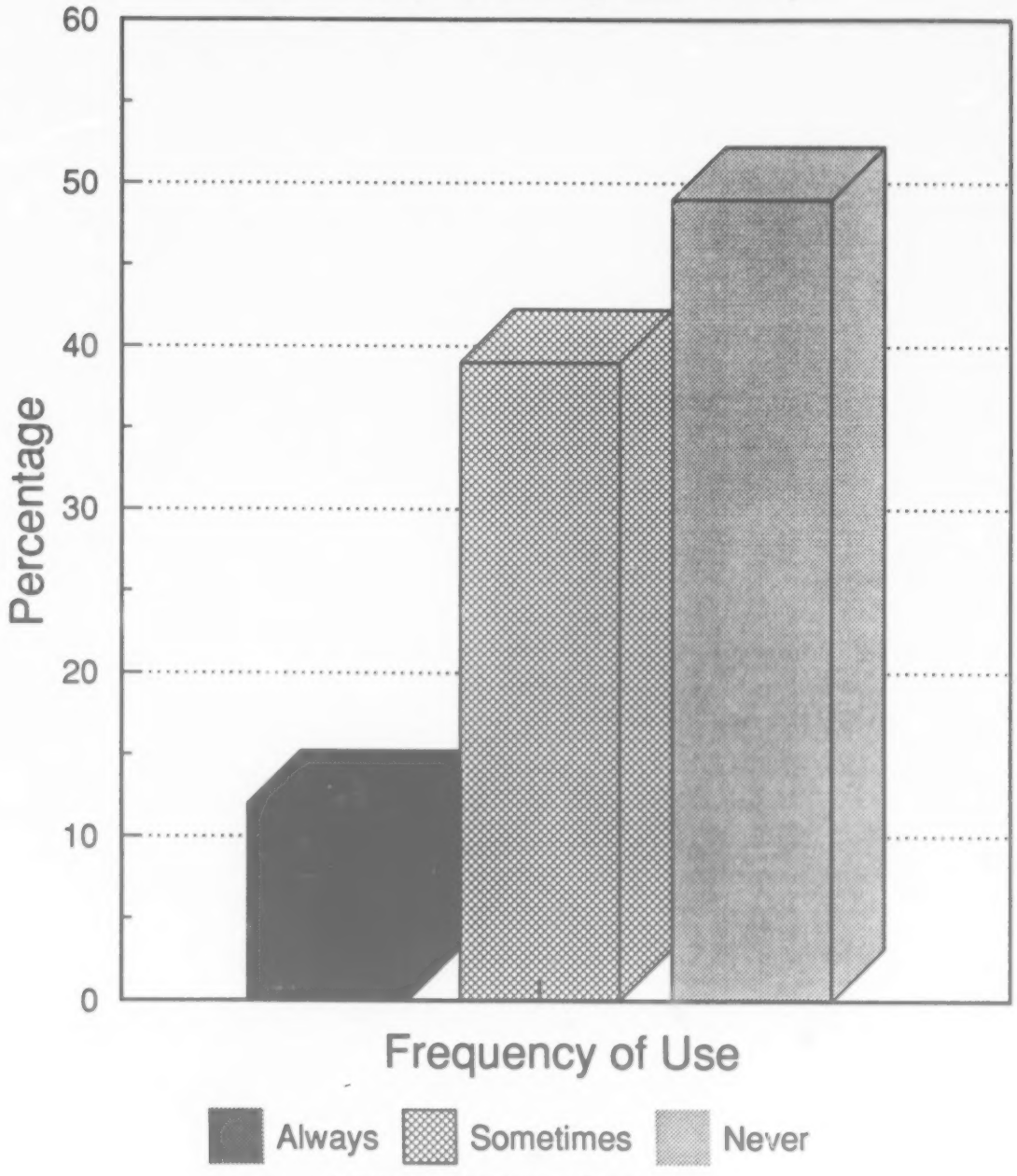


Statewide Percentage Response
Question No. 85

Chart 57

Use of Outside Consultants

1992 Marketing and Management Survey

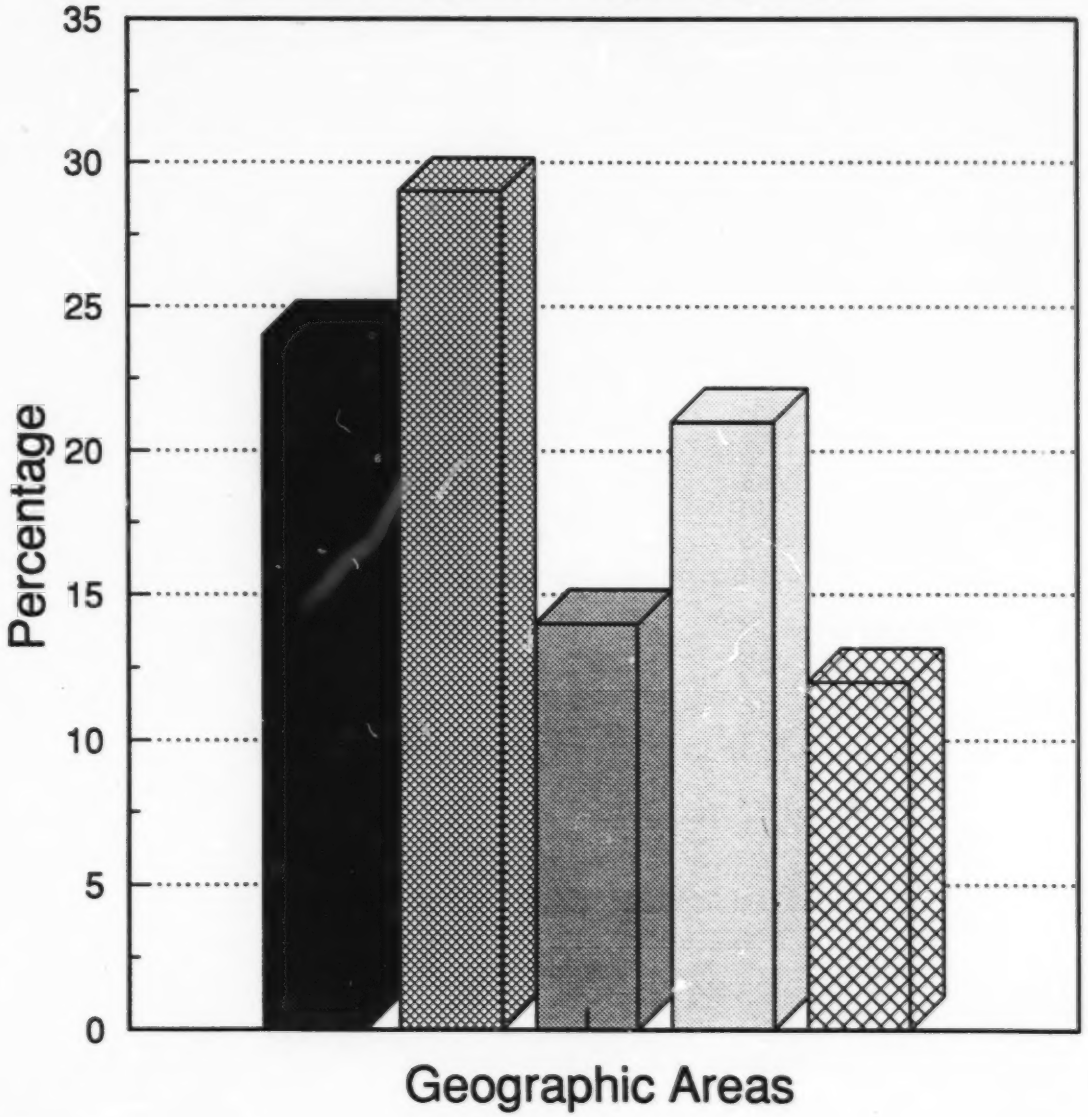


Statewide Percentage Response
Question No. 86

Chart 58

Geographic Areas of Interest to Companies

1992 Marketing and Management Survey

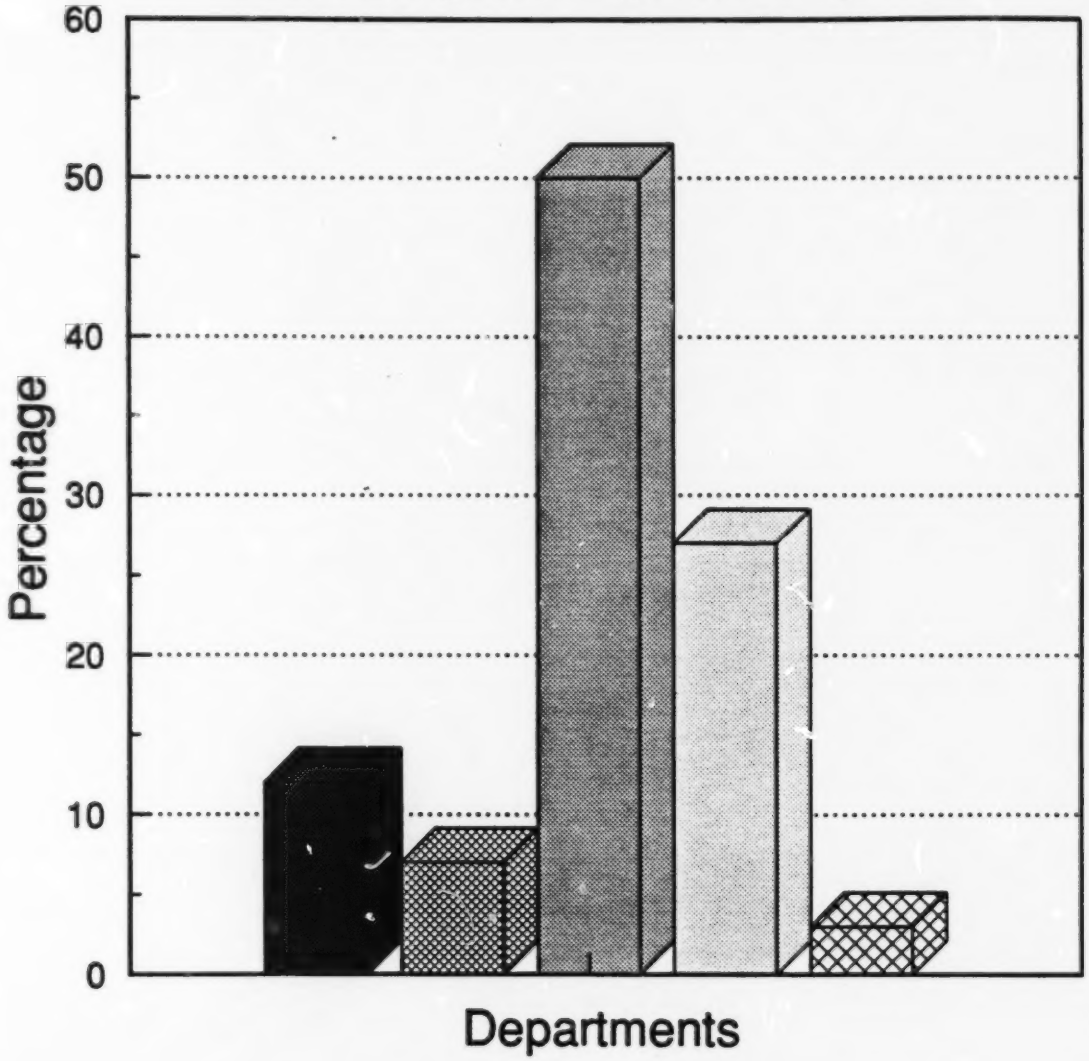


Statewide Percentage Response
Question No. 87

Chart 59

International Trade Job Opportunities

1992 Marketing and Management Survey



Statewide Percentage Response
Question No. 88